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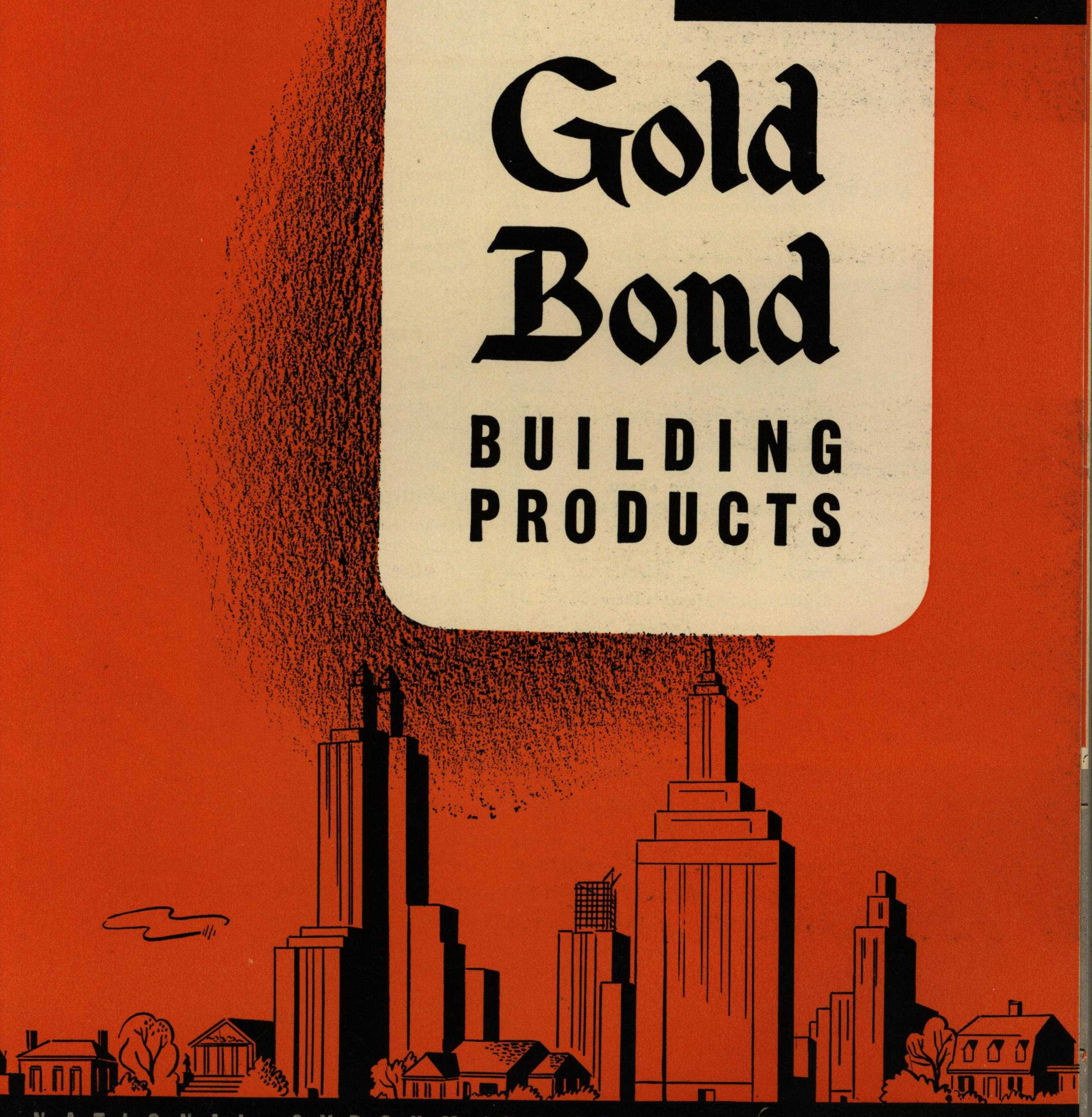
HANDBOOK OF 1949 Gold Bond BUILDING PRODUCTS



NATIONAL GYPSUM COMPANY • Buffalo 2, N.Y.

Gold Bond

BUILDING PRODUCTS

TABLE OF CONTENTS

Section One
PLASTER BASES

Pages
Standard Gypsum Lath 2
Perforated Gypsum Lath 3
Foil-backed Gypsum Lath 4
Metal Lath and Accessories 5-8

Section Two
PARTITION SYSTEMS

2″ Solid Partition System 10-11
  Detail Drawings 12-16
Hollow Wall Partition System 17-18
  Detail Drawings 19-24

Section Three
GYPSUM PLASTERS AND LIME

Gypsum Plasters 25-32
Best Bros' Keene's Cement 33
Finishing and Mason's Lime 34
Specifications for Lathing and Plastering 35-42

Section Four
GYPSUM BOARDS

Pages
Gypsum Wallboards 44-46
Perforated Tape Joint System 47
Grain Board 48-49
Gypsum Sheathing 50-51
Paint Products 52

Section Five
INSULATION PRODUCTS

Rock Wool Insulation 54-57
  (home, commercial, industrial)
Wood Fibre Insulation 58-60
  (board, tile, sheathing)

Catalog 11a/7
SOUND CONTROL PRODUCTS

Econacoustic 3
Acoustifibre 4
Acoustex 5
Acoustimetal 6-7-8
Sprayed "Limpet" Asbestos 9
"Macoustic" Acoustical Plaster . . 10-11

Catalog 3c/10
GYPSUM "POURED-IN-PLACE" ROOF DECK

NATIONAL GYPSUM COMPANY, BUFFALO 2, N. Y.

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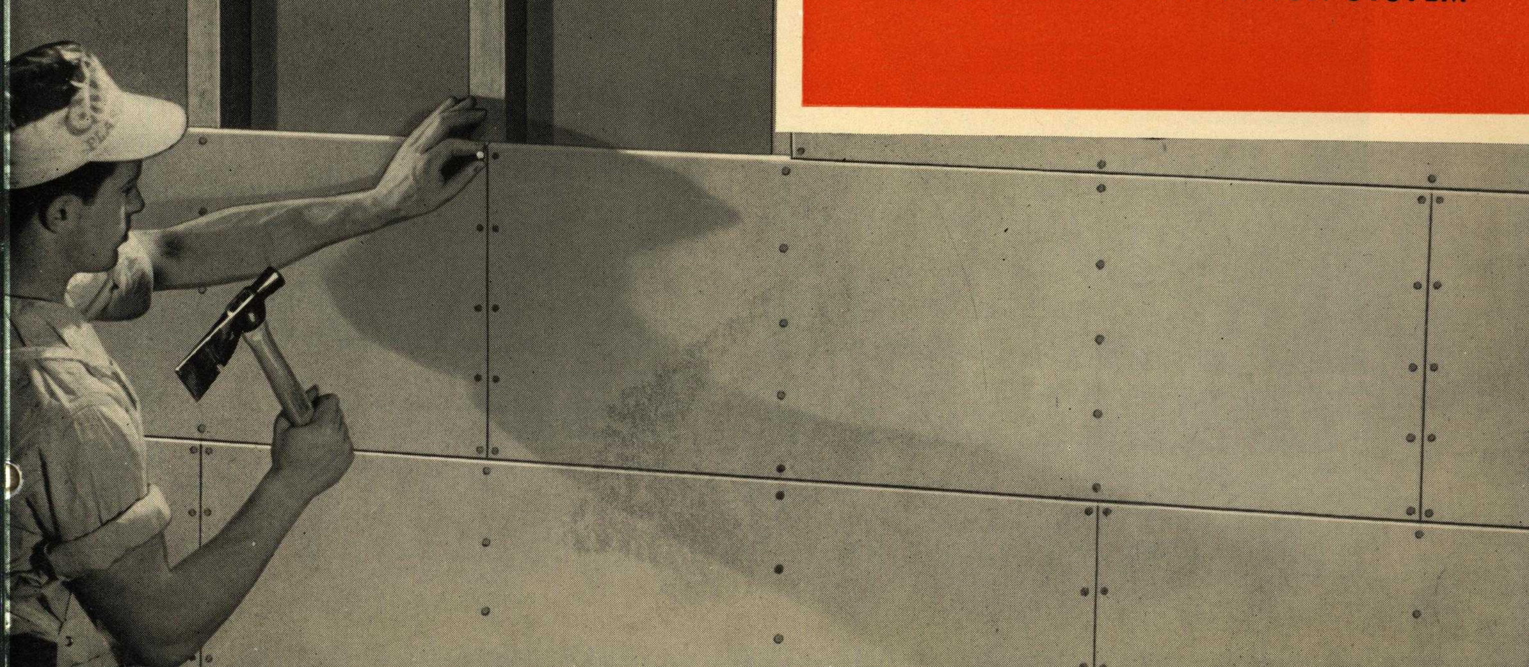

SECTION ONE

Gold Bond
PLASTER BASES

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Page 2
STANDARD GYPSUM LATH

Page 3
PERFORATED GYPSUM LATH

Page 4
FOIL-BACKED GYPSUM LATH

Page 5
METAL LATH

Pages 6-8
METAL LATH ACCESSORIES

Pages 9-16
2-INCH SOLID PARTITION SYSTEM

Pages 17-24
HOLLOW WALL PARTITION SYSTEM

Gold Bond

PLASTER BASES

STANDARD GYPSUM LATH . . . . The modern, fireproof plaster base. Quickly applied. Saves plaster.

GOLD BOND GYPSUM LATH is made under the same exclusive patents as Gold Bond Gypsum Wallboard, the only difference being that the sizes are smaller and the gypsum core is encased in a heavy fibre sheet that bonds tightly with plaster. The long sides have closed edges and are round, as illustrated. The short ends are cut perfectly square.

Superior Bond to Plaster

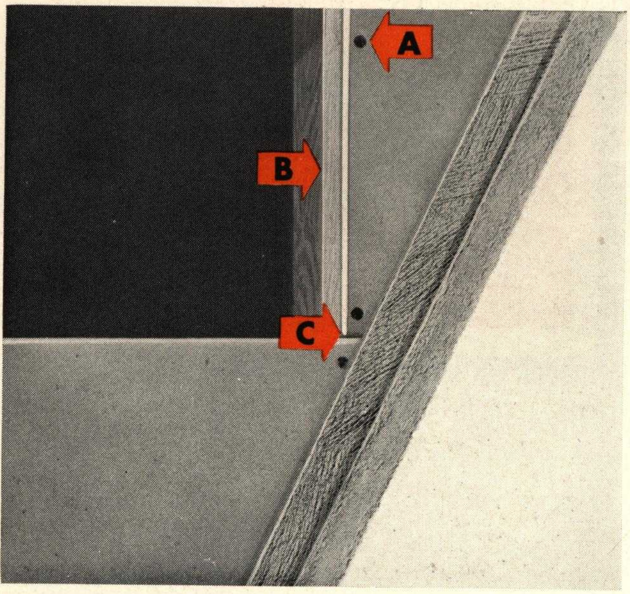
The bond of plaster to Gold Bond Gypsum Lath is not dependent on mechanical keys but is obtained by the felting action of billions of gypsum crystals in the set plaster embedding themselves onto the surface of the Gold Bond Gypsum Lath during the setting action. Authoritative tests have shown this bond to be three times as great as the mechanical bond obtained on wood lath.

Fireproof . . . Adds Structural Strength

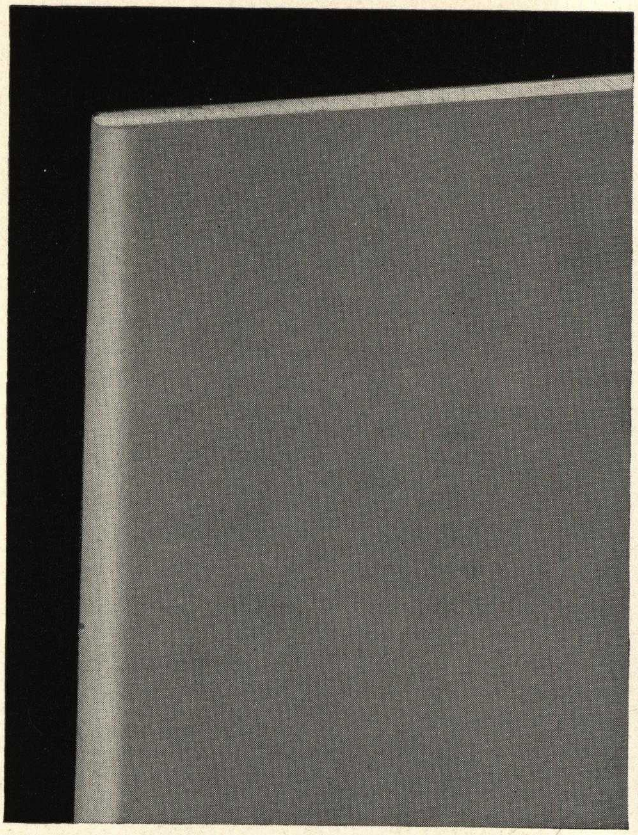
Because of its solid gypsum core, Gold Bond Gypsum Lath is non-inflammable and non-combustible. When plastered in the usual way, it builds a gypsum wall with rock-like rigidity full ⅞ in. thick—⅜ in. gypsum lath and ½ in. gypsum plaster.

Won't Warp or Buckle—Saves Plaster Cracks

Plaster cracks are often due to expansion or contraction of the lath. This can't happen with Gold Bond as the panels are as inert as stone itself. They are unaffected by dampness or climatic changes and remain perfectly flat under all normal conditions, providing the ideal base for plaster.



(A) Nails placed ⅜″ in from outside edges, spaced 4″ o. c. along studs. (B) Stud. (C) Apply lath panels at right angles to studs with joints staggered.



The solid gypsum core of Gold Bond Gypsum Lath is encased in a tough fibre covering which provides an effective bond with plaster.

Cuts Labor Cost and Saves Plaster

With wood lath, spaces are left between the laths and much of the plaster goes into these spaces to form "keys." No "keys" are required with Gold Bond. The sturdy panels are butted together and *all* the plaster goes on the surface of the lath. This saving of plaster is considerable on a house of average size. Application costs are cut, too, as the large panels of Gold Bond are applied much quicker than the narrow wood lath strips.

* Sizes and Thicknesses

Gold Bond Gypsum Lath is usually made in three sizes, 16 x 48 in. (standard), also 16 x 32 in. and 16 x 36 in.—standard thickness ⅜ in., also ½ in.

**Until the housing shortage is less critical, Gold Bond Gypsum Lath will be made in one size only, 16 in. x 48 in. x ⅜ in. thick.*

Gold Bond

PLASTER BASES

PERFORATED GYPSUM LATH . . . Has every feature of Standard Gypsum Lath plus 1-hour fire rating.

GOLD BOND PERFORATED GYPSUM LATH is standard lath with holes the size of a nickel drilled through the panels. When the surface is plastered, enough of the plaster is forced through the perforations to form mushroom-like "keys" as pictured in the next column. Insures a double bond with plaster—the natural or chemical bond that occurs between the indented surface of the lath and the plaster, plus the mechanical bond provided by the "keys."

One Hour Fire Rating

Gold Bond Perforated Gypsum Lath has qualified for a one hour fire rating for walls and ceilings when applied as follows:

Walls—Gold Bond ⅜ in. Perforated Gypsum Lath plastered in the usual manner with ½ in. of gypsum plaster.

Ceilings—Gold Bond ⅜ in. Perforated Gypsum Lath applied with five nails to each joist, Gold Bond 3 in. Stripite over all joints and plastered with ½ in. thickness of gypsum plaster.

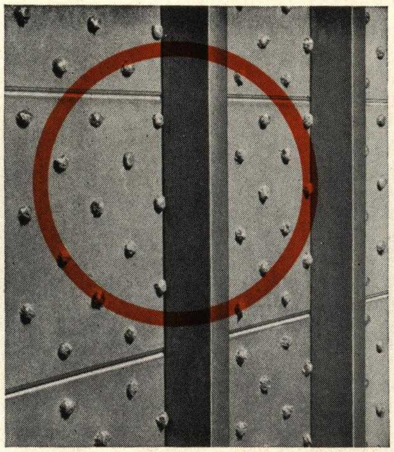
These official tests were made according to Standard Specifications of Fire Tests of Building Constructions and Materials, ASA No. A2, 1934.

Other Advantages That Combine to Make This An Outstanding Plaster Base

In addition to its one hour fire rating, Gold Bond Perforated Gypsum Lath offers these important advantages over old-style inflammable wood lath: It is moisture proof and unaffected by climatic changes. Won't expand, contract, buckle or twist. The rock-like panels add greater strength so that the plaster walls and ceilings are better able to withstand structural strains. Homes in which this fireproof modern plaster base is used have an extra appeal to prospective buyers.

Application

Gold Bond Perforated Gypsum Lath is applied the same as standard gypsum lath . . . five nails to each stud—the nails to be approx. 4 in. apart and ⅜ in. from edge—first nail ⅜ in. from top of panel. For ceilings with one hour fire rating, follow instructions under "One Hour Fire Rating" in first column.

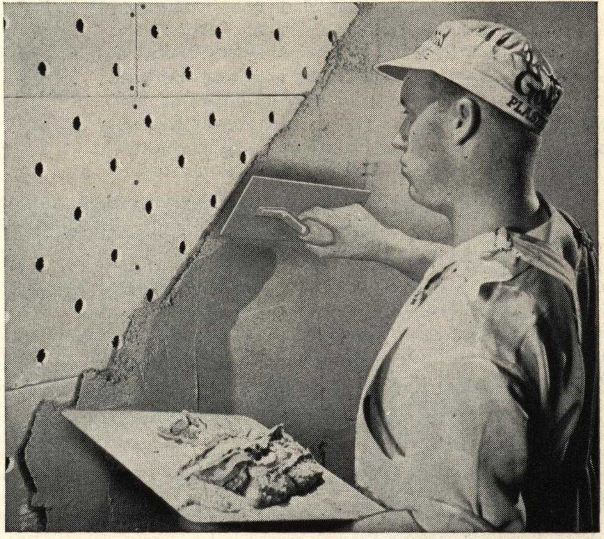


Standard Size

16 x 48 in. x ⅜ in. thick.
*See preceding page.

(at left)
Mushroom-like keys, which grip the lath tightly, automatically form on reverse side of lath.

Sturdy rock-like panels of Gold Bond Perforated Gypsum Lath are applied quicker than wood lath and give wood framing the fire protection it needs.



As the plaster is trowelled on, the workman can feel the perforations take hold. The small picture above shows what actually happens on the reverse side of the lath.

Gold Bond

PLASTER BASES

FOIL-BACKED GYPSUM LATH . . . . Standard lath with highly effective vapor barrier and insulator.

The reflective side of Gold Bond Foil-backed Gypsum Lath is a combination insulator and vapor barrier. The gray side forms a powerful bond with plaster.

WATER VAPOR is absolutely invisible up to the very instant that it condenses from gaseous to liquid form as in steam, fog, clouds or mist on cold surfaces. This invisibility is, perhaps, the chief reason why the effects of water vapor in buildings have heretofore received too little consideration.

Condensation Causes Troubles

Condensation of water vapor occurs anywhere in the wall structure or filler when the air temperature falls below the dew point for its absolute humidity. This can be at any temperature from jungle heat to arctic cold. Condensation in the wrong places causes trouble. It reduces the effectiveness of bulk-type insulation by bridging dead air spaces with heat-conducting particles of water. It causes dry rot in wood. It lifts the paint film from wood siding. It warps wood framing, which cracks plaster.

Vapor Barrier Halts Humidity

But in new construction, condensation troubles can be prevented, easily. It's simply a matter of putting a highly effective vapor barrier between the moisture-laden warm interior air and the cooler wall space or structure. Aluminum Foil is 4 to 5 times as effective as commonly used vapor barriers. A thin layer of aluminum foil, constitutes the outer surface of Gold Bond Foil-backed Gypsum Lath.

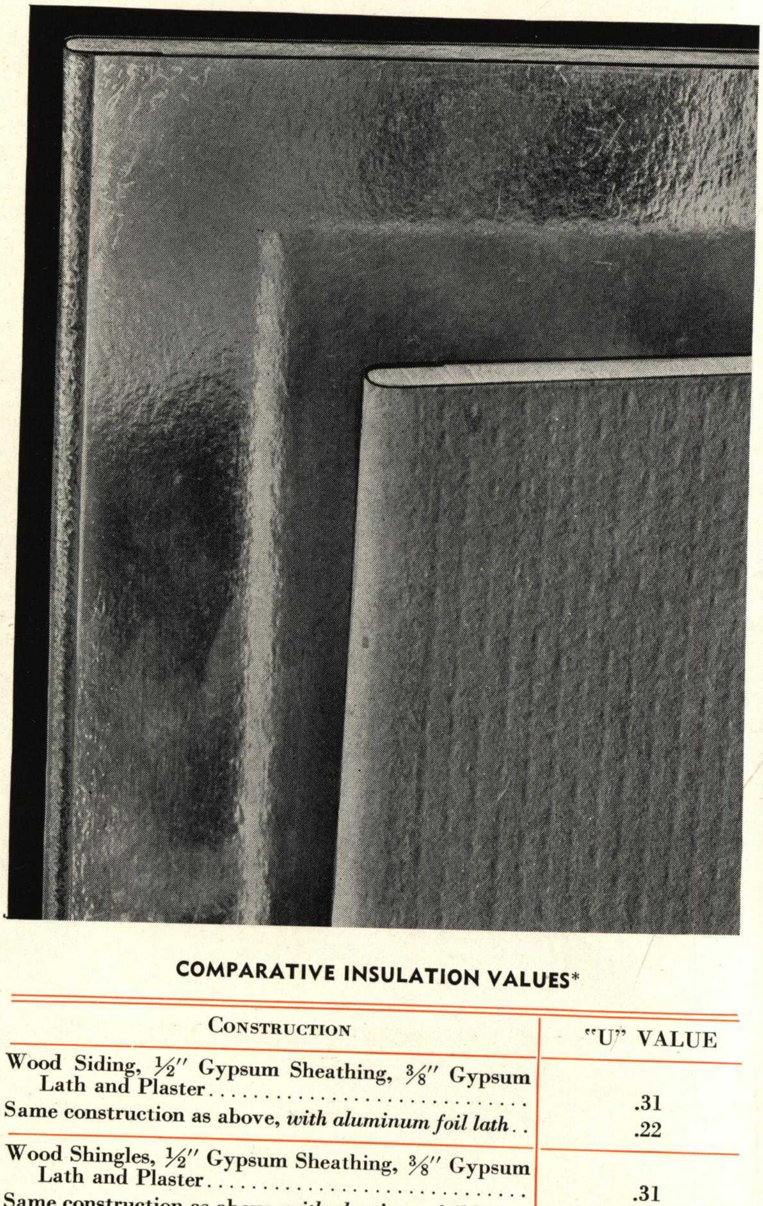
It keeps healthful humidity inside the building and retards the passage of water vapor to the wall structure where condensation can be harmful. The aluminum foil also keeps the excess water of plastering away from the wood framing and so eliminates a source of warping which may crack plaster.

High Insulation Value

For the above reasons alone Gold Bond Foil-backed Gypsum Lath should be specified for the plaster base of new homes. It should also be remembered that Gold Bond Gypsum Lath is fireproof and that when facing an open air space, the aluminum foil provides excellent reflective insulation.

Size and Thickness

Gold Bond Foil-backed Gypsum Lath is now made in one size only, 16 in. x 48 in. x 3/8 in. thick. It is applied in the same manner as standard gypsum lath and always with the foil toward the framing. Since the gray side has the same indented fibre surface as standard Gold Bond Gypsum Lath it develops the same powerful bond with plaster.



COMPARATIVE INSULATION VALUES*

CONSTRUCTION	"U" VALUE
Wood Siding, 1/2″ Gypsum Sheathing, 3/8″ Gypsum Lath and Plaster.	.31
Same construction as above, *with aluminum foil lath* . .	.22
Wood Shingles, 1/2″ Gypsum Sheathing, 3/8″ Gypsum Lath and Plaster.	.31
Same construction as above, *with aluminum foil lath* . .	.22
Stucco, 1/2″ Gypsum Sheathing, 3/8″ Gypsum Lath and Plaster.	.39
Same construction as above, *with aluminum foil lath* . .	.26
Brick Veneer, 1/2″ Gypsum Sheathing, 3/8″ Gypsum Lath and Plaster.	.35
Same construction as above, *with aluminum foil lath* . .	.24

*American Society of Heating and Ventilating Engineers.

Gold Bond

METAL LATH PRODUCTS

METAL LATH . . . A full line of metal lath and accessories designed for every building need.

NATIONAL GYPSUM COMPANY manufactures at its Niles, Ohio plant a full line of metal lath products and accessories.

For years metal lath, because of its unmatched strength and one hour fire rating for both walls and ceilings, has been invariably specified as the plaster base for buildings and the better class of homes. Lately it has come into common use for all types of residences including homes in the low-cost brackets. As one expert puts it, "Savings realized on repair and decorating bills over the years are every bit as important to owners of small homes as to those who own mansions."

The National Board of Fire Underwriters gives Metal Lath with gypsum plaster on wood studs a one hour fire rating—second only to reinforced concrete and above all others in resistance to earthquake and explosion shocks.

Only a few of the most commonly used products are illustrated in this section including the famous Gold Bond 2 in. Solid Partition System, used in many fine apartments and housing jobs. Other products not shown here are: Corner Beads (Scalloped, Wide Flange, Standard Bull Nose and Bull Nose Expansion), Base Screed (Curved Point and Expansion Flush), Corner Bead Clips and Channel Clips, Hot Rolled Channels, Galvanized Tie Wire, Pencil Rods, Coal Doors and Steel Basement Sash.

Illustrated catalogs of the Gold Bond 2 in. Solid Partition System, the Hollow Wall Partition System will be furnished gladly to interested architects, engineers and contractors. Address Metal Lath Division, National Gypsum Company, Buffalo 2, N. Y.

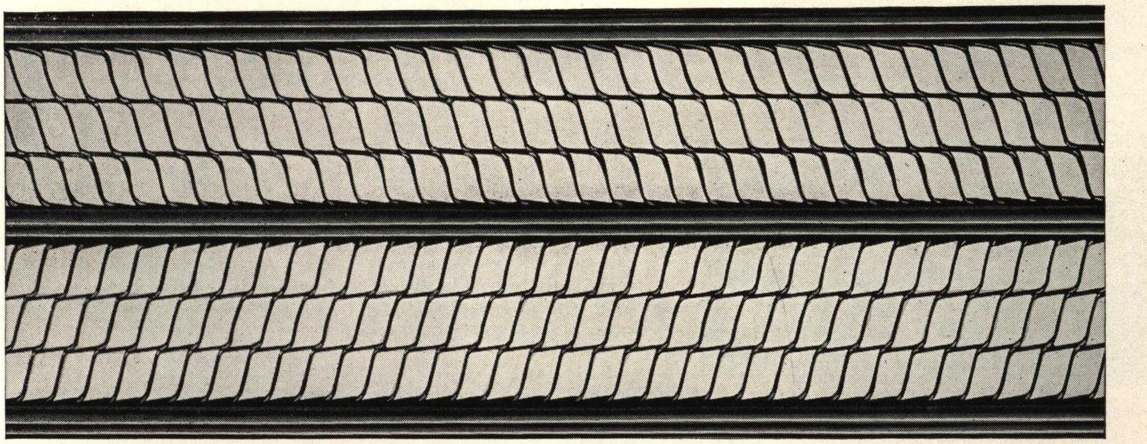
Partitions made of Gold Bond Metal Lath and plastered are rated by the National Board of Fire Underwriters as second only to reinforced concrete.

Gold Bond 1/8-in. Flat Rib Lath

Designed to meet the demand for a more rigid expanded metal lath, Gold Bond 1/8 in. Flat Rib Lath with its 1280 meshes per square foot provides more plaster keys than any other like product. The new size—27 x 96 in. speeds application as it can be put up in exactly the same time as old style 24 x 96 in. sheets.

Standard Weights—2.75 and 3.4 lb. Furnished in copper bearing steel.

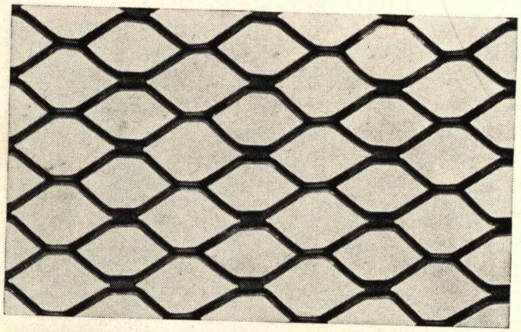
Sheet Sizes—24 x 96 in. 9 sheets per bundle or 16 sq. yds.
—27 x 96 in. 10 sheets per bundle or 20 sq. yds.



Gold Bond

METAL LATH PRODUCTS

METAL LATH . . . Most of the standard types are illustrated here, with Flat Rib on preceding page.



Gold Bond Small Diamond Mesh Lath

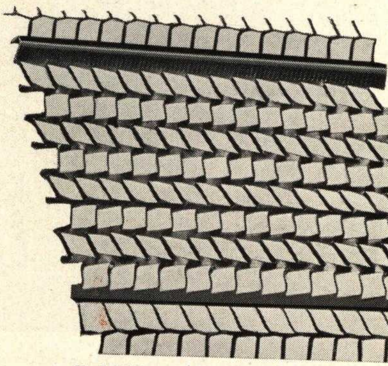
Gold Bond Small Diamond Mesh Lath

Can be used on any type of metal lath job. It constitutes better than 50% of all the metal lath sold.

Gold Bond Small Mesh boasts of having as small a mesh as any diamond mesh manufactured; containing approximately 11,000 keys per square yard. All sheets lie perfectly flat and each sheet is individually re-squared assuring full covering width. Regular ⅜ in. mesh can be furnished upon request. Is made from open hearth box annealed sheets.

Standard Weights—2.5, 3.4 lb. Furnished in painted copper alloy steel. Galvanized in 3.4 lb. only.

Sheet Sizes—24 in. x 96 in.	9 sheets per bundle or 16 sq. yds.
27 in. x 96 in.	10 sheets per bundle or 20 sq. yds.



Gold Bond ⅜-in. Rib Lath

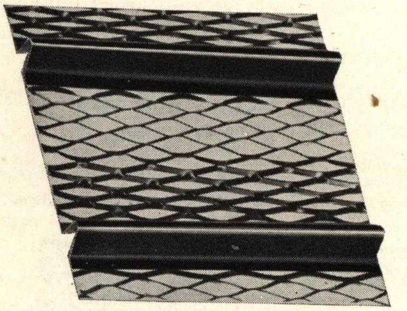
Gold Bond ⅜-in. Rib Lath

Is generally used for ceiling and for concrete reinforcing in floors in connection with steel joists, junior beams, etc.

Gold Bond ⅜ in. Rib Lath is outstanding for its rigidity. Ribs are 4 in. on center. Sheets nest perfectly when lapped providing a smooth base for plaster, with bulges eliminated and plaster waste reduced. Manufactured from copper alloy steel sheets.

Standard Weights—3.4 and 4.0 lb. Furnished in painted copper alloy steel.

Sheet Sizes—24 in. x 96 in. 9 sheets per bundle or 16 sq. yds.



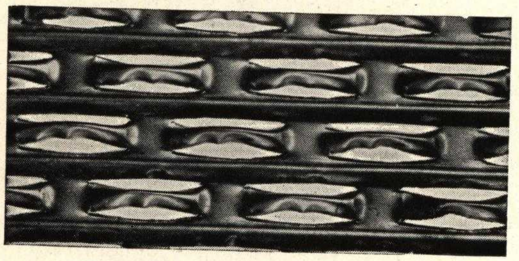
Gold Bond ¾-in. Rib Lath

Gold Bond ¾-in. Rib Lath

Used mainly as a form and reinforcement in concrete slab floor and roof construction. Won't bulge or sag. Ribs are spaced 4 in. on centers ¾ in. deep. . . . Also adapted for use as a plaster base in the construction of 2-in. solid partitions. Due to the rigidity and reinforcing feature of the ribs, no studs are required.

Standard Weights—.60 lb., .75 lb. per sq. ft. Furnished in painted copper alloy steel.

Sheet Sizes—24 in. x 6, 8, 10, 12 ft. 9 sheets per bundle.



Bostwick Sheet Lath

Bostwick Sheet Lath

Is used generally for tile backing due to its being the most rigid lath manufactured. It requires considerably less plaster than any other type of metal lath and, therefore, is often used on residences and large apartment buildings. The trough formation of the ribs creates a suction and makes it the ideal lath for overhead work on ceilings. Manufactured from copper alloy steel sheets.

Standard Weights.—4.5 lb. in painted copper alloy steel.

Sheet Size—24 in. x 96 in. 9 sheets per bundle or 16 sq. yds.

Gold Bond

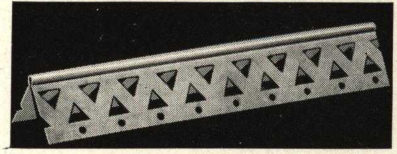
METAL LATH PRODUCTS

METAL LATH ACCESSORIES . . . Only the principal items in the Gold Bond Line are shown here.

Gold Bond Arch Corner Bead

Gold Bond Arch Corner Bead is the all-purpose corner bead. Used for vertical and horizontal corners or may be easily bent for arches. Full description on next page.

Stock Lengths—8, 9, 10 and 12 ft. Made in 26 gauge. Packed 10 pieces per bundle. Weighs 200 lbs. per 1000 lin. ft.

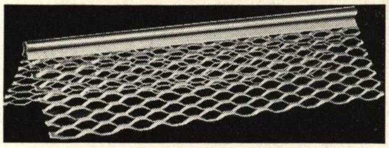


Gold Bond Arch Corner Bead

Gold Bond Standard Expanded Corner Bead

Gold Bond Standard Expanded Corner Bead can be used in all types of construction. Forms an exceptionally fine key due to the reinforcing given by the 2½ in. wings. Is easily erected.

Stock Lengths—8, 9, 10 and 12 ft. Made in 26 gauge. Shipped in crates of approximately 500 or 1000 ft. only. Weighs 230 lbs. per 1000 lin. ft.

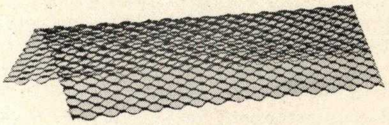


Gold Bond Standard Expanded Corner Bead

Gold Bond Safe-Edge Cornerite

New smooth edge. Especially fabricated and formed in the factory—not merely cut from full-sized sheets. Easier to handle. Speeds plastering—no rough edges to interfere with troweling; no turned-up points to bend back in place; no plaster waste. Made from copper-bearing steel. Painted black.

Sizes—2″ x 2″ x 96″, 3″ x 3″ x 96″. Packed 75 pieces (600 lineal feet) per bundle.

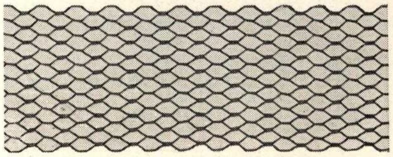


Gold Bond Cornerite

Gold Bond Safe-Edge Stripite

Also has new smooth edge and is especially fabricated. For use over joints and at corners of windows and door frames to provide additional reinforcement under plaster. Furnished in copper-bearing steel, painted black.

Size—3″ x 96″. Packed 75 pieces (600 lineal feet) per bundle.

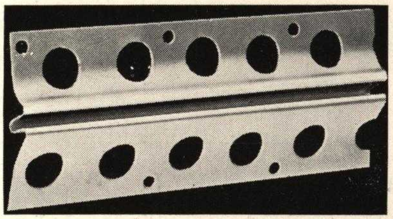


Gold Bond Stripite

Gold Bond Picture Mould

Gold Bond Picture Mould is a metal concealed picture moulding. It is erected before walls are plastered and is practically invisible when wall is finished.

Stock Length—10 ft. only. 26 gauge. 10 pieces per bundle. Weighs 260 lbs. per 1000 lin. ft.

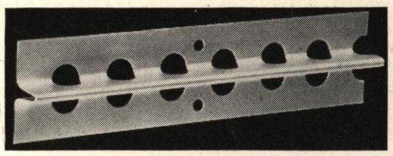


Gold Bond Picture Mould

Gold Bond Standard Base Screed

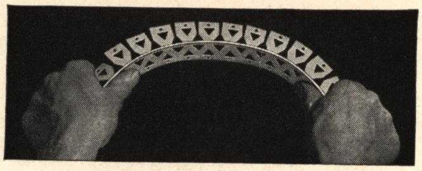
Gold Bond Standard Base Screed is used as a ground where the cement base is to be divided from the plastered wall. Assures a straight and perfect division line. Made in ½ in. ground only.

Stock Length—10 ft. only. 26 gauge. 10 pieces per bundle. Weighs 160 lbs. per 1000 lin. ft.

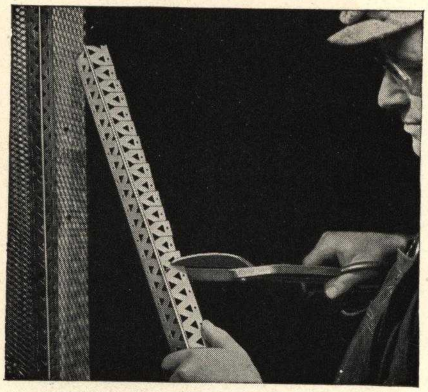


Gold Bond Standard Base Screed

GOLD BOND METAL LATH ACCESSORIES



Won't Kink or Break



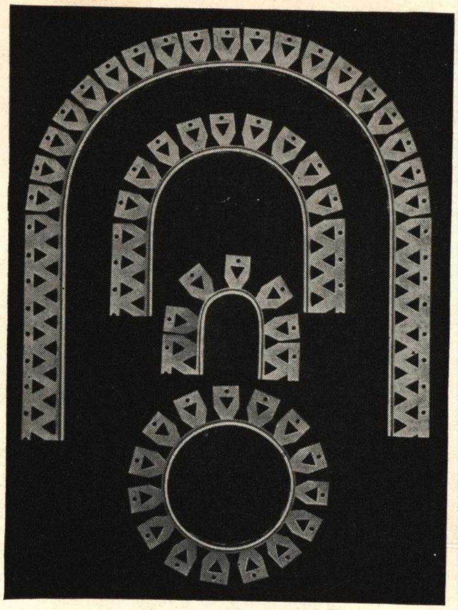
Easily Prepared for Bending

ARCH CORNER BEAD

Gold Bond Arch Corner Bead serves a double purpose. It is used as a straight corner bead for vertical and horizontal corners and as an arch bead for curved openings. With it, arches of any curvature can be made on the job, quickly and at a decided saving.

Ordinary corner beads invariably break or kink at the nose when bent. Not so with Gold Bond Arch Corner Bead because its unique design permits utmost flexibility. No mechanical bender is necessary. Simply snip one flange as illustrated at the left and bend to the desired radius. Fits over any style of lath. The flanges have twice as many perforations as most corner beads which means more plaster "keys" and greater bonding strength.

Supplied in lengths of 8, 9, 10 and 12 ft. Made in 26 gauge. Packed 10 pieces per bundle. Weighs 200 lbs. per 1000 lineal ft.



For Ornamental Plaster Work

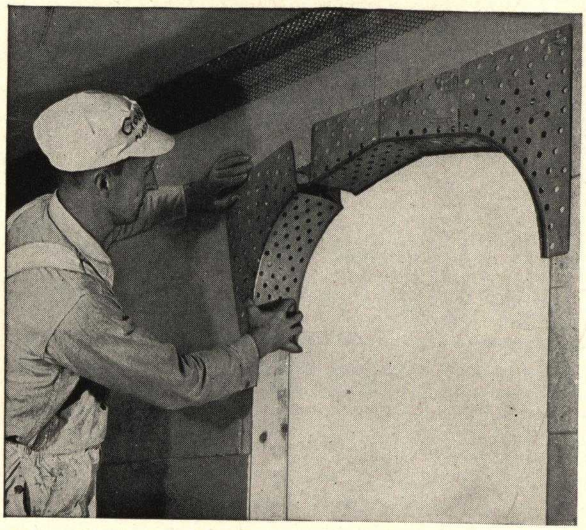
GOLD BOND METAL ARCHES

Are made from galvannealed sheet steel. A perfect arch for approximately half the cost of curved wood forms to which must be fitted corner bead and metal lath. They are easy to erect and are ideal for residences and apartment houses. Gold Bond Metal Arches are made in true circle, gothic and elliptic designs. They are standard for 2x4 studs or bucks. The studs or bucks are to be spaced 1½ in. wider than the desired finished opening.

This allowance is for the thickness of the lath and plaster ground. Can be joined with standard corner bead by using the shank of a No. 7 box nail.

STYLES AND ERECTION DETAILS

STYLE OF ARCH	SPACING OF STUDS OR BUCKS	WIDTH OF FINISHED OPENING
No. 11	21½″	20″
No. 22	33″	31½″
No. 33	33″	31½″
No. 36	39″	37½″
No. 44	51″	49½″
No. 55	63″	61½″
No. 66	72″	70½″



Gold Bond Metal Arches are easily fitted over the lath. Saves time and insures perfectly formed arches

GOLD BOND COLD ROLLED CHANNELS

TYPES, STOCK LENGTHS, BUNDLING

TYPE	STOCK LENGTHS SHOWN IN FEET	PACKED PCS. PER BDLE.	WEIGHT, LBS. 1000 LIN FT.
¾ in.	16, 20	20	300
1½ in.	16, 20	10	475

Furnished painted only.

Are used generally for suspended ceiling work and 2 in. solid partitions. They are formed cold from the best quality strip steel. Gold Bond Channels are absolutely straight. They are easily formed yet remain very rigid in the finished wall.

SECTION TWO

Gold Bond PARTITION SYSTEMS

Pages 10-16
2-INCH SOLID PARTITION SYSTEM

Pages 12-16
CONSTRUCTION DETAILS

Pages 17-24
HOLLOW WALL PARTITION SYSTEM

Pages 19-24
CONSTRUCTION DETAILS

Gold Bond

PARTITION SYSTEMS

2-IN. SOLID PARTITION SYSTEM . . . Builds fireproof, space-saving walls. Many other features.

ARCHITECTS are finding the Gold Bond 2-in. Solid Partition System the best means of increasing floor space and reducing partition costs. So compact that it saves approximately 3 in. per wall, this system is recommended for fireproof, nonbearing partitions, in all types of buildings including hotels, apartments, hospitals, office buildings and housing projects.

Used in scores of big jobs from coast to coast—from fine apartments to low cost slum clearance jobs—the Gold Bond 2-in. Solid Partition System has again and again demonstrated its practicability, economy and all-around superiority.

New Metal Base and Adjustable Clips Installed 10% to 25% Faster

The distinctive new Gold Bond Metal Base and Adjustable Clips are pictured below. These clips take the base sections *one side at a time*, lock them securely in place with one simple turn. The slotted arms are adjustable to take care of floor variations up to $\frac{3}{8}$ in.

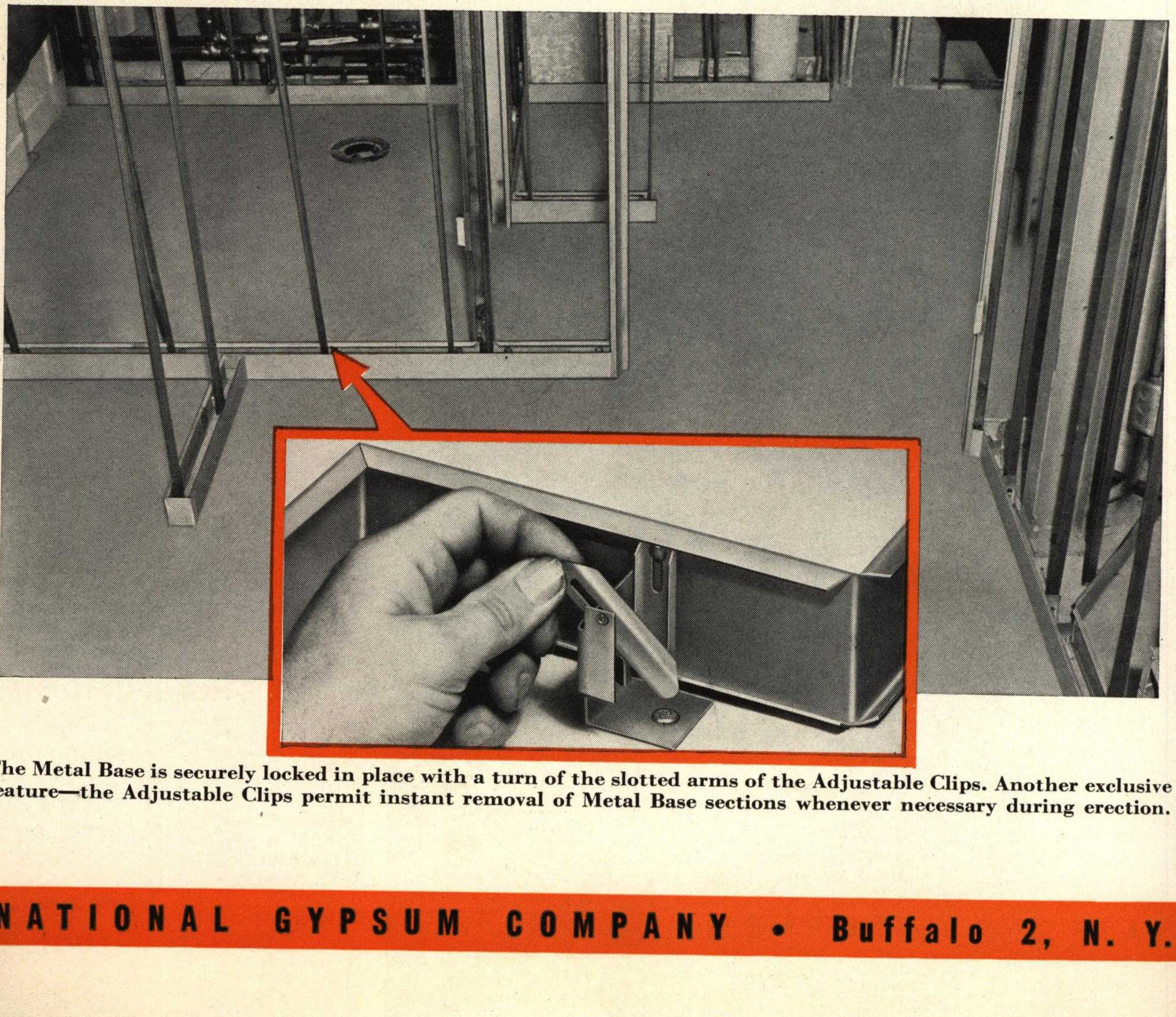
Extra expense of special T's or pre-fabricated corner units is entirely eliminated as the metal base can be quickly cut or bent on the job to take care of unusual angles or irregularities. The base sections are neatly joined in one easy operation with Gold Bond Splice Plates. Joints are hardly noticeable.

Formed on the Job!

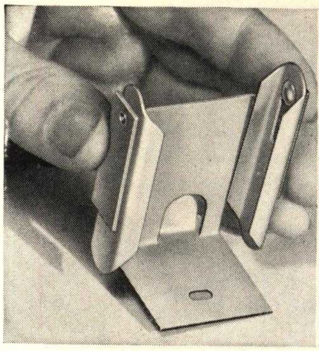
Special cutting and bending equipment which may be rented at low cost through Gold Bond Dealers makes it easy to form all metal base angles right on the job. There is no need whatever for factory-formed parts.

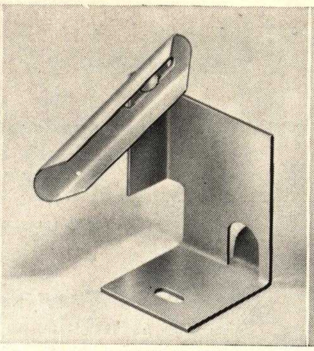
Only Four Units Required

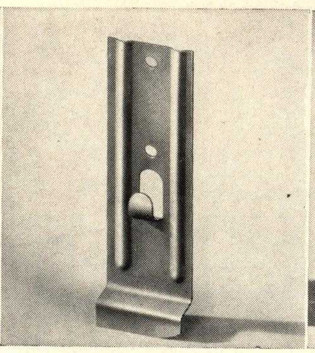
Only four units are used in this simplified system—the ceiling runner, metal base, metal base clips, and the steel studs which are standard $\frac{3}{4}$-in. cold rolled channels. For the plaster base, Gold Bond Diamond Mesh Metal Lath is recommended. An illustrated book with further details of this system will be sent upon request.

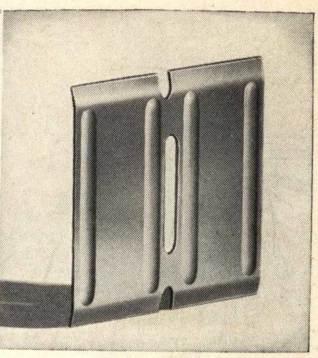


The Metal Base is securely locked in place with a turn of the slotted arms of the Adjustable Clips. Another exclusive feature—the Adjustable Clips permit instant removal of Metal Base sections whenever necessary during erection.


Metal Base Clip


Furred Wall Clip


Masonry Wall Clip


Splice Plate

Other Advantages

Fire Protection—Official tests have been made subjecting this system to heat and flame for a 5-hr. period without failure—the temperature reaching a high of 2000 degrees.

Sound Insulation—Superior to hollow 4 to 5 in. wood stud walls of the same weight in reducing sound transmission. Noise reduction factor of 37.7 decibels.

Crack Resistance—This monolithic unit of solid steel and gypsum, securely anchored to floor and ceiling, offers stubborn resistance to tension, shear, impact and vibration.

Light Weight—Gold Bond 2-in. Solid Partitions weigh only 17½ lbs. per square foot as compared with 27½ lbs. for 4-in. clay tile and plaster.

Alternate Units

Ceiling Runners—Two styles of ceiling runners are available—the "Z" Runner and the "Prong" Runner, both illustrated below. As both styles allow for irregularity of ceiling height, channels may be ordered cut to length. Either runner may be used at the option of the contractor.

Base Treatments—Either the new Metal Base with the Adjustable Clips may be used or the Floor Runner shown below. The Metal Base serves a triple purpose. It holds the channel studs in perfect alignment, provides an accurate ground for plaster, results in a neat and durable finished base . . . the Channel Floor Runner is used where specifications call for wood, linoleum or concrete base.

SPECIFICATIONS FOR GOLD BOND 2-IN. SOLID PARTITION SYSTEM

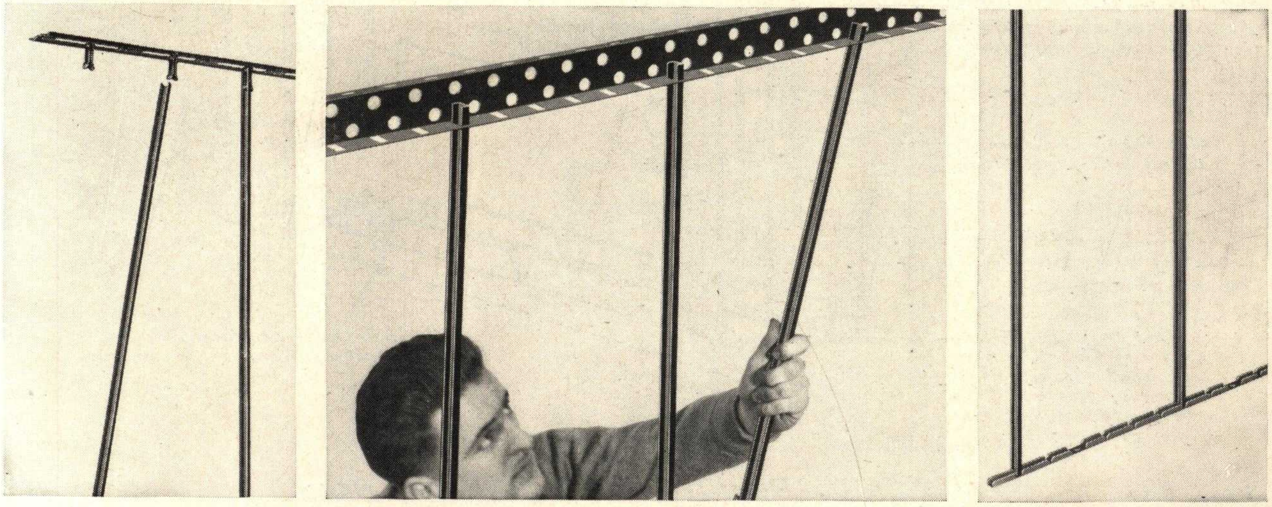
Where 2-inch solid partitions are indicated on plans or written in specifications, the Gold Bond Solid Partition System with Metal Base shall be used.

Materials

1. Metal Base shall be (2½ in. or 3 in. high) fabricated from (16, 18 or 20 gauge) galvanized steel, painted one shop coat neutral gray primer. Gold Bond Base Clips for Double Base, Furred Wall or Masonry Wall Construction shall be used to attach the Metal Base for their respective types of construction.
2. Ceiling Runners shall be Gold Bond "Z" or "Prong" type runners.
3. Channel Studs shall be standard Gold Bond ¾-in. Cold Rolled Channels.
4. Gold Bond ⅛-in. Flat Rib Lath or Diamond Mesh Metal Lath.
5. Gold Bond 3-in. Safe-Edge Cornerite.
6. Gold Bond 18-Gauge Tie Wire.
7. Gold Bond Corner Bead, Picture Mould and Base Screed.
8. Gold Bond Base Coat Plaster, Gold Bond Gauging Plaster and Gold Bond Finish Lime.

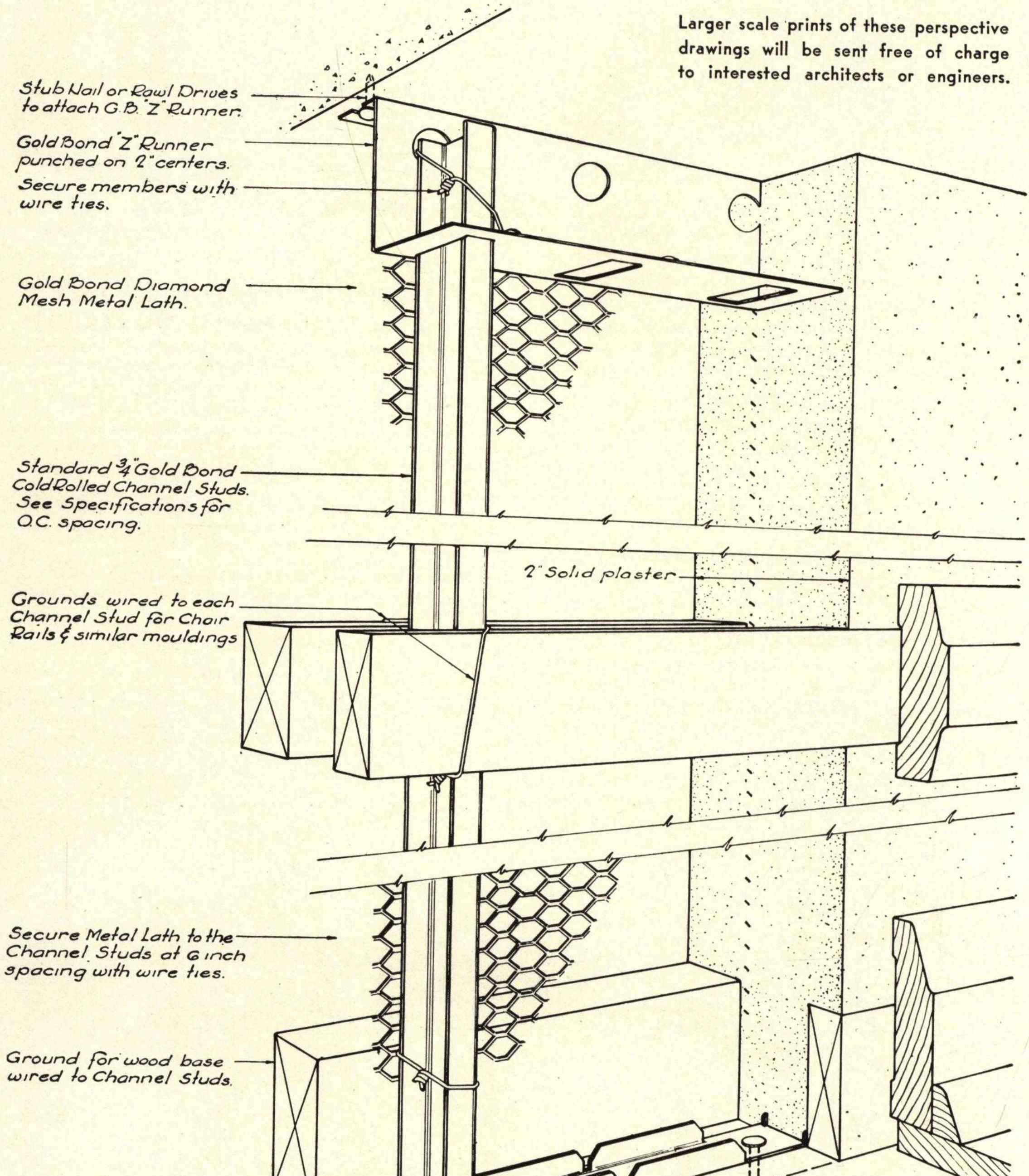
Application

1. Gold Bond Ceiling Runner and Metal Base Clips shall be securely fastened to ceiling and floor with ½-in. concrete stub nails or Rawl Drives or other approved manner.
2. Metal Base shall be applied to Base Clips. All corners and angles shall be formed on job to meet requirements. Splice Plates shall be used at each abutting joint.
3. Channel Studs inserted in ceiling runner and dropped into slots provided in Base Clips.
4. Metal Lath shall be tied to one side of studs at intervals of 6 inches.
5. All internal angles shall be lined with 3-in. Cornerite. Corner Bead, Picture Mould and Screeds shall be wired to the partition after the lath has been applied.
6. Plaster. Follow specifications for Plastering over Metal Lath. The Metal Base shall be entirely filled with plaster grout at the time the scratch coat is applied.


CEILING AND FLOOR RUNNERS
(*At left*) "Prong" Ceiling Runner. . . . (*Center*) "Z" Ceiling Runner. Both types allow for ceiling height variations. (*At right*) Channel-shaped Floor Runner. The channels fit securely into slots without the necessity of tying.

GOLD BOND 2" SOLID PARTITION SYSTEM

Larger scale prints of these perspective drawings will be sent free of charge to interested architects or engineers.


Stub Nail or Rawl Drives to attach G.B. "Z" Runner.
Gold Bond "Z" Runner punched on 2" centers.
Secure members with wire ties.
Gold Bond Diamond Mesh Metal Lath.
Standard ¾" Gold Bond Cold Rolled Channel Studs. See Specifications for O.C. spacing.
2" Solid plaster
Grounds wired to each Channel Stud for Chair Rails & similar mouldings
Secure Metal Lath to the Channel Studs at 6 inch spacing with wire ties.
Ground for wood base wired to Channel Studs.
½" Gold Bond Box Type Channel Floor Runner with stud notches at 2" intervals. Also cut & punched for nailing to floor at 12" centers.
Stub Nails or Rawl Drives for attachment at 12" centers.

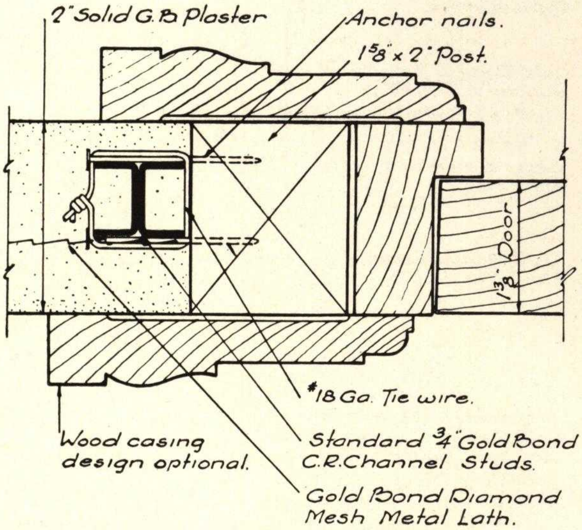
2" SOLID PLASTER PARTITION ASSEMBLY

Showing Wood Base and Chair Rail Attachment.

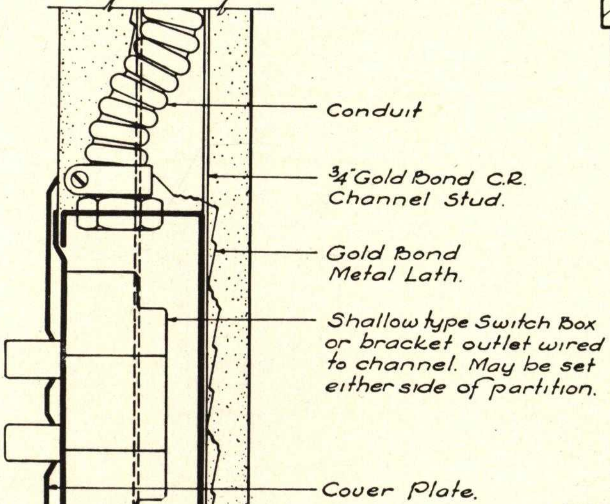
GOLD BOND 2" SOLID PARTITION SYSTEM

WOOD TRIM DETAILS
AND SERVICE OUTLET

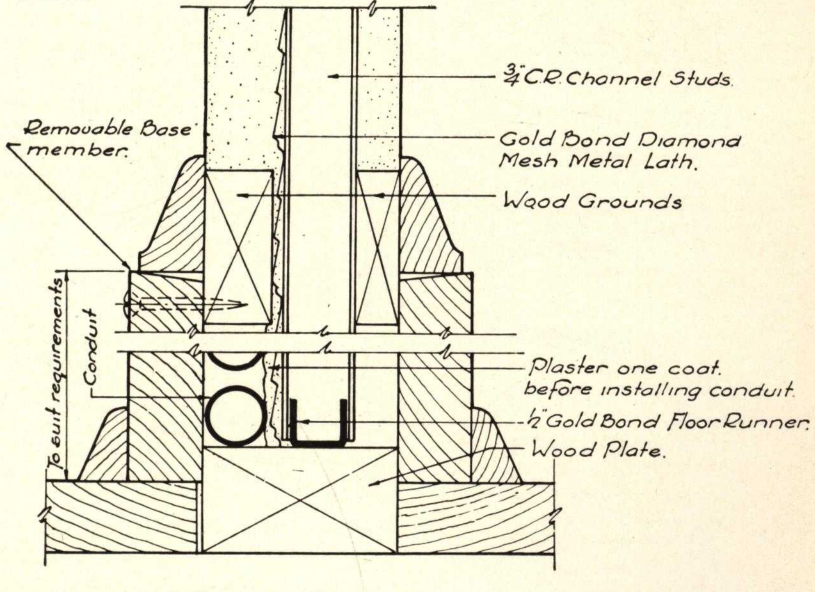
Full scale prints of all of these detail drawings will be sent free of charge to interested architects or engineers.


2" Solid G.B. Plaster
Anchor nails.
1 5/8" x 2" Post.
1 3/8" Door
#18 Ga. Tie wire.
Wood casing design optional.
Standard 3/4" Gold Bond C.R. Channel Studs.
Gold Bond Diamond Mesh Metal Lath.

WOOD JAMB


Conduit
3/4" Gold Bond C.R. Channel Stud.
Gold Bond Metal Lath.
Shallow type Switch Box or bracket outlet wired to channel. May be set either side of partition.
Cover Plate.
2" Solid Plaster

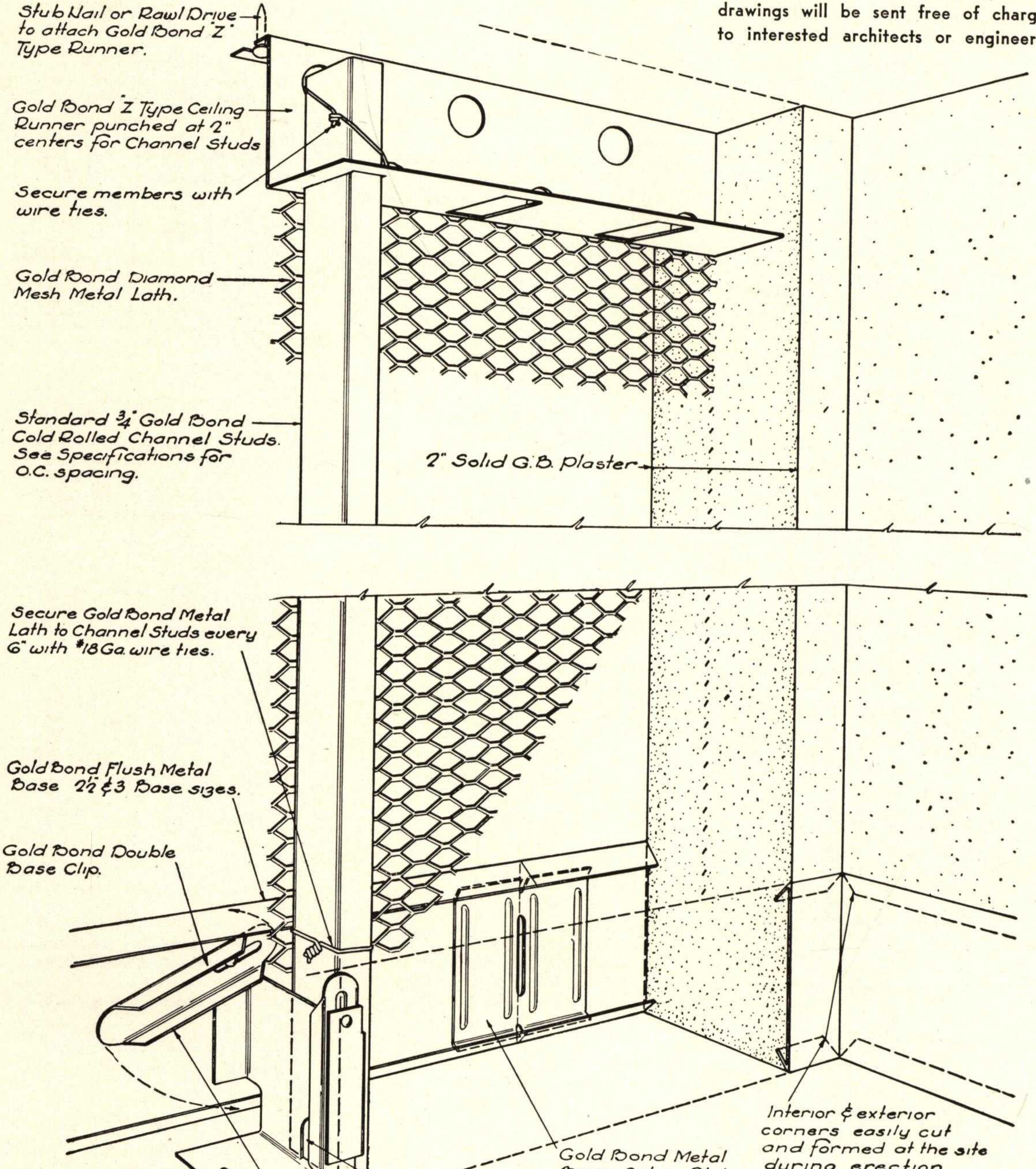
SWITCH BOX


3/4" C.R. Channel Studs.
Removable Base member.
Gold Bond Diamond Mesh Metal Lath.
Wood Grounds
To suit requirements
Conduit
Plaster one coat before installing conduit.
1/2" Gold Bond Floor Runner.
Wood Plate.

WOOD BASE
Housing Elect. Conduit.

GOLD BOND 2" SOLID PARTITION SYSTEM

Larger scale prints of these perspective drawings will be sent free of charge to interested architects or engineers.

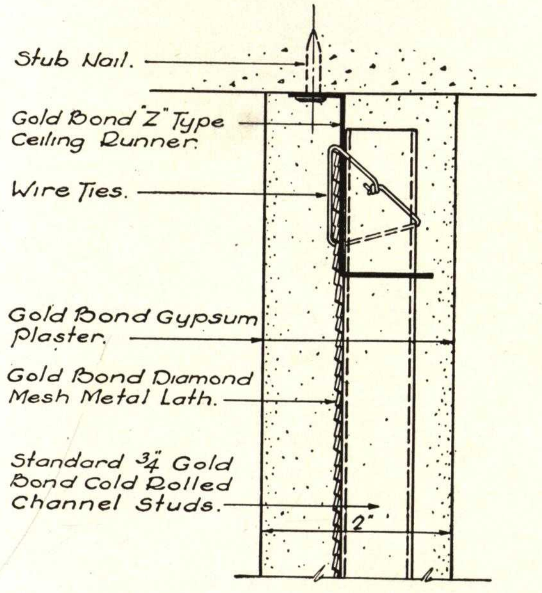

Stub Nail or Rawl Drive to attach Gold Bond "Z" Type Runner.
Gold Bond "Z" Type Ceiling Runner punched at 2" centers for Channel Studs
Secure members with wire ties.
Gold Bond Diamond Mesh Metal Lath.
Standard ¾" Gold Bond Cold Rolled Channel Studs. See Specifications for O.C. spacing.
2" Solid G.B. Plaster
Secure Gold Bond Metal Lath to Channel Studs every 6" with #18 Ga. wire ties.
Gold Bond Flush Metal Base 2½ & 3 Base sizes.
Gold Bond Double Base Clip.
Interior & exterior corners easily cut and formed at the site during erection.
Gold Bond Metal Base Splice Plate.
Channel Stud sets into Clip slot.
Slotted arms swing to vertical position to lock G.B. Flush Base in proper alignment.
Stub Nails or Rawl Drives for floor attachment.

PERSPECTIVE OF 2" SOLID PLASTER PARTITION

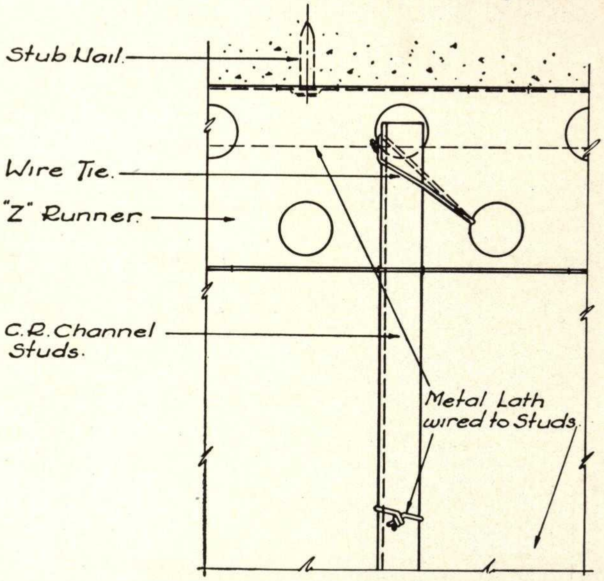
Showing Assembly With Gold Bond Flush Type Metal Base

GOLD BOND 2" SOLID PARTITION SYSTEM

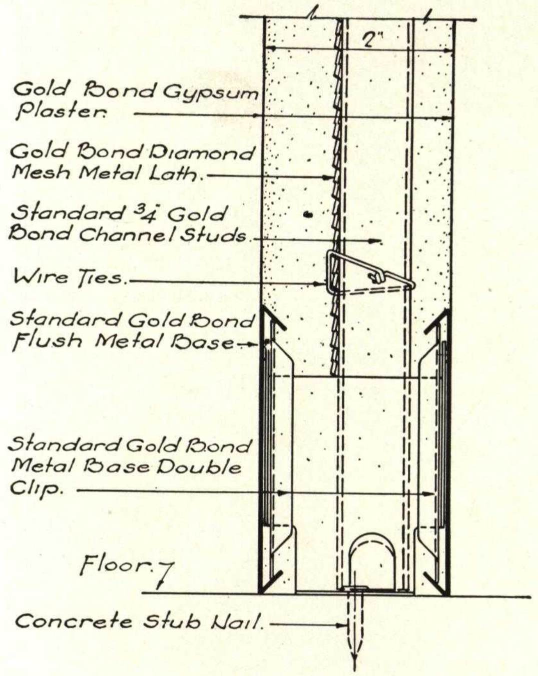
Full scale prints of all of these detail drawings will be sent free of charge to interested architects or engineers.


Stub Nail.
Gold Bond "Z" Type Ceiling Runner.
Wire Ties.
Gold Bond Gypsum Plaster.
Gold Bond Diamond Mesh Metal Lath.
Standard 3/4" Gold Bond Cold Rolled Channel Studs.
2"

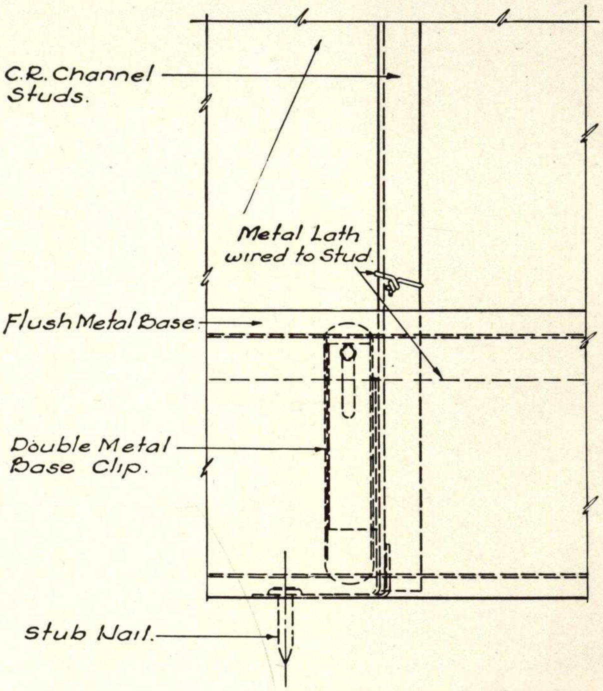
SECTION AT CEILING


Stub Nail.
Wire Tie.
"Z" Runner.
C.R. Channel Studs.
Metal Lath wired to Studs.

ELEVATION AT CEILING


2"
Gold Bond Gypsum Plaster.
Gold Bond Diamond Mesh Metal Lath.
Standard 3/4" Gold Bond Channel Studs.
Wire Ties.
Standard Gold Bond Flush Metal Base.
Standard Gold Bond Metal Base Double Clip.
Floor.
Concrete Stub Nail.

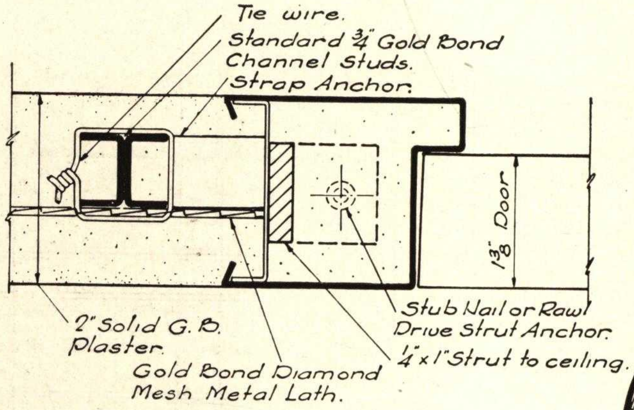
TYPICAL DETAIL AT BASE


C.R. Channel Studs.
Metal Lath wired to Stud.
Flush Metal Base.
Double Metal Base Clip.
Stub Nail.

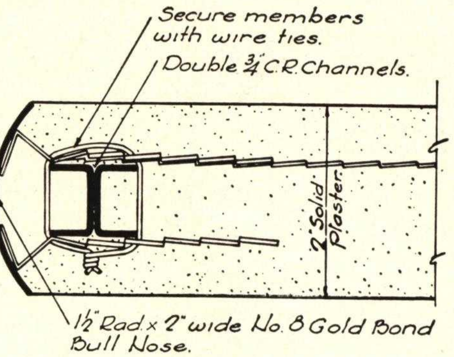
ELEVATION AT BASE

DETAILS OF METAL TRIM

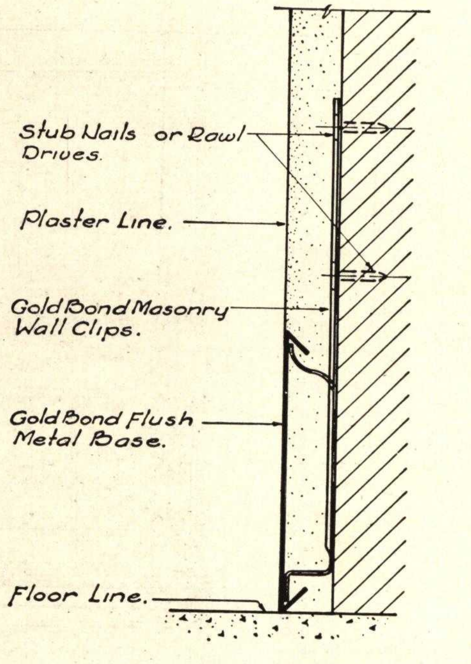
Full scale prints of all of these detail drawings will be sent free of charge to interested architects and engineers.


Tie wire.
Standard ¾" Gold Bond Channel Studs.
Strap Anchor.
1 3/8" Door
2" Solid G.B. Plaster.
Gold Bond Diamond Mesh Metal Lath.
Stub Nail or Rawl Drive Strut Anchor.
¼" x 1" Strut to ceiling.

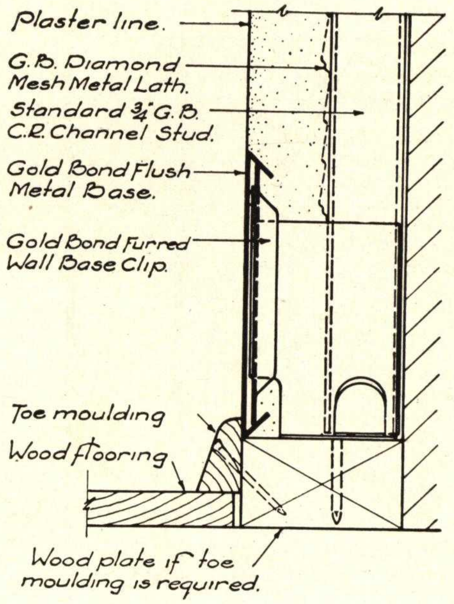
METAL DOOR BUCK


Secure members with wire ties.
Double ¾" C.R. Channels.
2" Solid Plaster.
1½" Rad x 2" wide No. 8 Gold Bond Bull Nose.

BULL NOSE CASED OPENING JAMB


Stub Nails or Rawl Drives.
Plaster Line.
Gold Bond Masonry Wall Clips.
Gold Bond Flush Metal Base.
Floor Line.

GOLD BOND MASONRY WALL CLIP


Plaster line.
G.B. Diamond Mesh Metal Lath.
Standard ¾" G.B. C.R. Channel Stud.
Gold Bond Flush Metal Base.
Gold Bond Furred Wall Base Clip.
Toe moulding
Wood flooring
Wood plate if toe moulding is required.

FURRED WALL CLIP

Gold Bond

PARTITION SYSTEMS

HOLLOW WALL SYSTEM . . . Easy to erect. Cuts noise transmission. Simplifies wiring and piping work.

THE GOLD BOND Hollow Wall System uses the same metal parts and has all the advantages of the 2 in. Solid Partition System described on the preceding pages, plus the following:

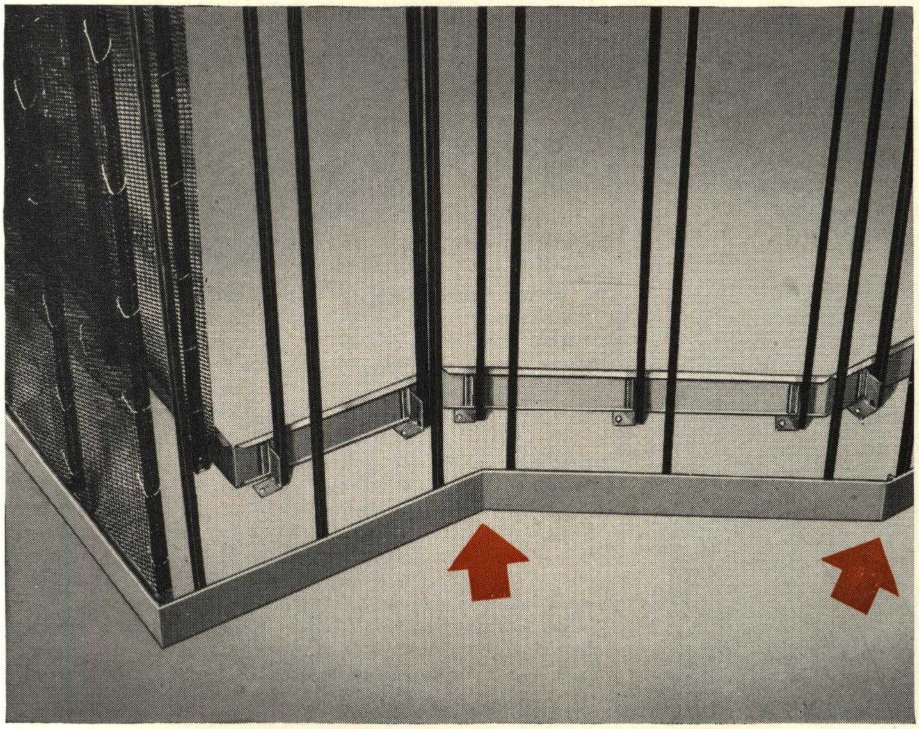
1. **Greatly reduces transmission of noise** from room to room. A 4 inch Gold Bond Hollow Wall Partition has a noise-reduction rating of 49.5 decibels—nearly 10 decibels better than ordinary hollow walls!

2. **Vastly simplifies installation** of wiring, water, steam and soil pipes and air ducts, because there are no intrawall members to interfere with horizontal or vertical runs.

3. **Builds any thickness of partition** from as narrow as 4 inches to whatever width is desired to enclose air ducts, chutes, etc.

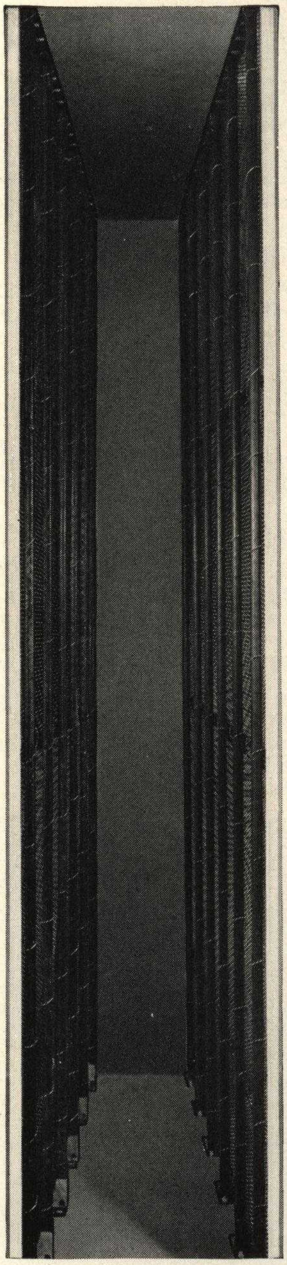
4. **Extra thickness costs no more.** Increasing the thickness to accommodate pipes, ducts, etc. adds nothing to the cost of Gold Bond Hollow Wall Partitions since no extra material or labor is required.

5. **Weighs less.** The total weight per square foot of Gold Bond Hollow Wall Partition is only 17½ to 18 lbs. as compared with 28 lbs. for 3 inch masonry and plaster. The dead load saving on a 10-foot wall may be as high as 100 lbs. per running foot!



ALL ANGLES FORMED ON THE JOB

Even the most intricate angles are formed right on the job with special shaping equipment which is rentable at low cost from National Gypsum Company. No special techniques are involved. No factory-formed shapes are ever required.



NO BRIDGING

Opposite walls of the partition are completely independent. No cross members.

SPECIFICATIONS

Scope of Work

Where Metal Lath non-bearing partitions are indicated on plans or as specified, the Gold Bond Hollow Wall Partition system shall be used.

Materials

1. Gold Bond "Z" Ceiling Runner made from 26 gauge steel painted one coat of asphalt paint.

2. Gold Bond ¾ in. Cold Rolled Channel Studs fabricated from 16 gauge steel. Painted one coat of asphalt paint.

3. Gold Bond Metal Base 2½ in. or 3 in. high, fabricated from 18-gauge galvanized steel, painted one shop coat neutral gray primer.

4. Gold Bond Metal Base Clip with single adjustable locking arm. 2½ in. or 3 in. high, fabricated from 18 gauge galvanized steel.

5. Gold Bond Metal Base Splice Plate, 2½ in. or 3 in. high fabricated from 18 gauge galvanized steel.

6. Gold Bond Diamond Mesh Lath, fabricated from copper alloy steel and painted one coat of asphalt paint.

7. Gold Bond No. 18 gauge Galvanized Tie Wire.

8. Rawl Drives or Concrete Stub Nails.

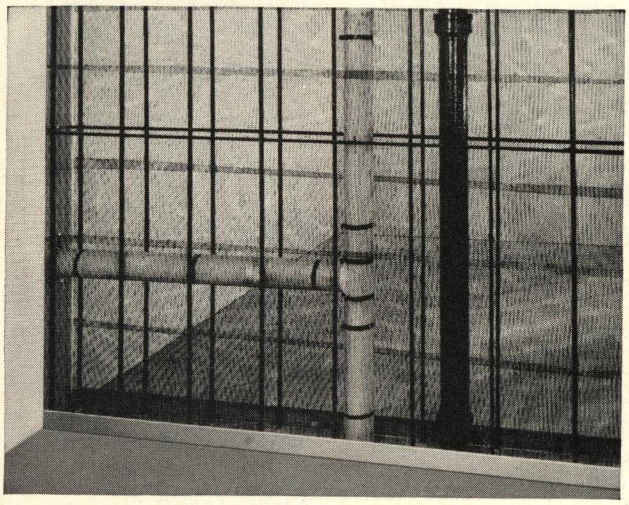
9. Gold Bond Corner Beads, Picture Moulding and Base Screed.

10. Gold Bond Base Coat Plaster, Gold Bond Gauging Plaster and Gold Bond Finish Lime.

Application

1. Two parallel rows of Gold Bond "Z" Ceiling Runner shall be spaced at the proper location to give a wall thickness as indicated on drawings or as specified, and shall be attached to the ceiling with Concrete Stub Nails or Rawl Drives or in other manner approved by architect.

2. Gold Bond Metal Base Clips shall be fastened to the floor with Concrete Stub Nails or Rawl Drives, or in other manner approved by architect. In locating Clips care should be taken to assure a wall that will finish perfectly true both horizontally and vertically.



Since there are no cross members in Gold Bond Hollow Wall Partitions, it is much simpler to install horizontal, vertical or sloping runs of pipes or ducts.

3. Channel Studs shall be inserted through the slots provided in "Z" Ceiling Runner, then dropped into stud prong in Metal Base Clip. Channel studs shall be spaced not to exceed 16 in. on center. If wider spacings are desired Gold Bond Flat Rib or ⅜ in. Rib Lath shall be used. Complete spacing data follows.

CORRECT SPACING OF CHANNEL STUDS

TYPE OF LATH	WEIGHT, LBS. PER SQ. YD.	MAXIMUM SPACINGS OF SUPPORTS
Gold Bond Diamond Mesh Lath	2.5 3.4	16 in. 16 in.
Gold Bond Flat Rib Lath	2.75 3.4	16 in. 24 in.
Gold Bond ⅜ in. Rib Lath	3.4 4.0	32 in. 32 in.

4. Gold Bond Metal Base shall be applied to clips and lever arms closed, locking it into position. All corners and angles shall be formed on the job to meet building conditions.

5. Each row of channel studs shall be permanently braced horizontally with ¾ in. Cold Rolled Channels securely tied to each stud. The horizontal stiffeners shall be spaced not to exceed 4 ft. on centers vertically and should be placed so that there is no contact between opposite sides of partition.

6. Gold Bond Metal Lath shall be applied with the long dimension of the sheets across the Channel Studs. End laps shall be at least 1 in. and shall be made over channels. Long edges of Diamond Mesh Lath shall be lapped at least ½ in. Long edges of Rib Lath shall be lapped by nesting the outer ribs. Lath shall be wired with No. 18 gauge galvannealed wire to all Channel Studs at intervals of not more than 6 in. and laps between channels shall be tied at intervals of not more than 9 in.

7. At all internal angles, metal lath shall be extended around the angle or intersection to continuously reinforce the plaster.

8. Galvanized Corner Beads, Picture Moulding, and Base Screeds, wherever indicated shall be wired to the partition after lath is applied. These shall be shimmed where necessary to bring to true alignment. Ties shall be at intervals not to exceed 12 in.

9. Where exterior walls are to be furred with steel Channel Studs follow the same procedure used in erecting one side of Gold Bond Hollow Wall.
Where plaster is to be applied directly on masonry or where exterior walls are furred with wood the Gold Bond Masonry Wall Clip shall be used to attach metal base to the wall.

Suspended Ceilings

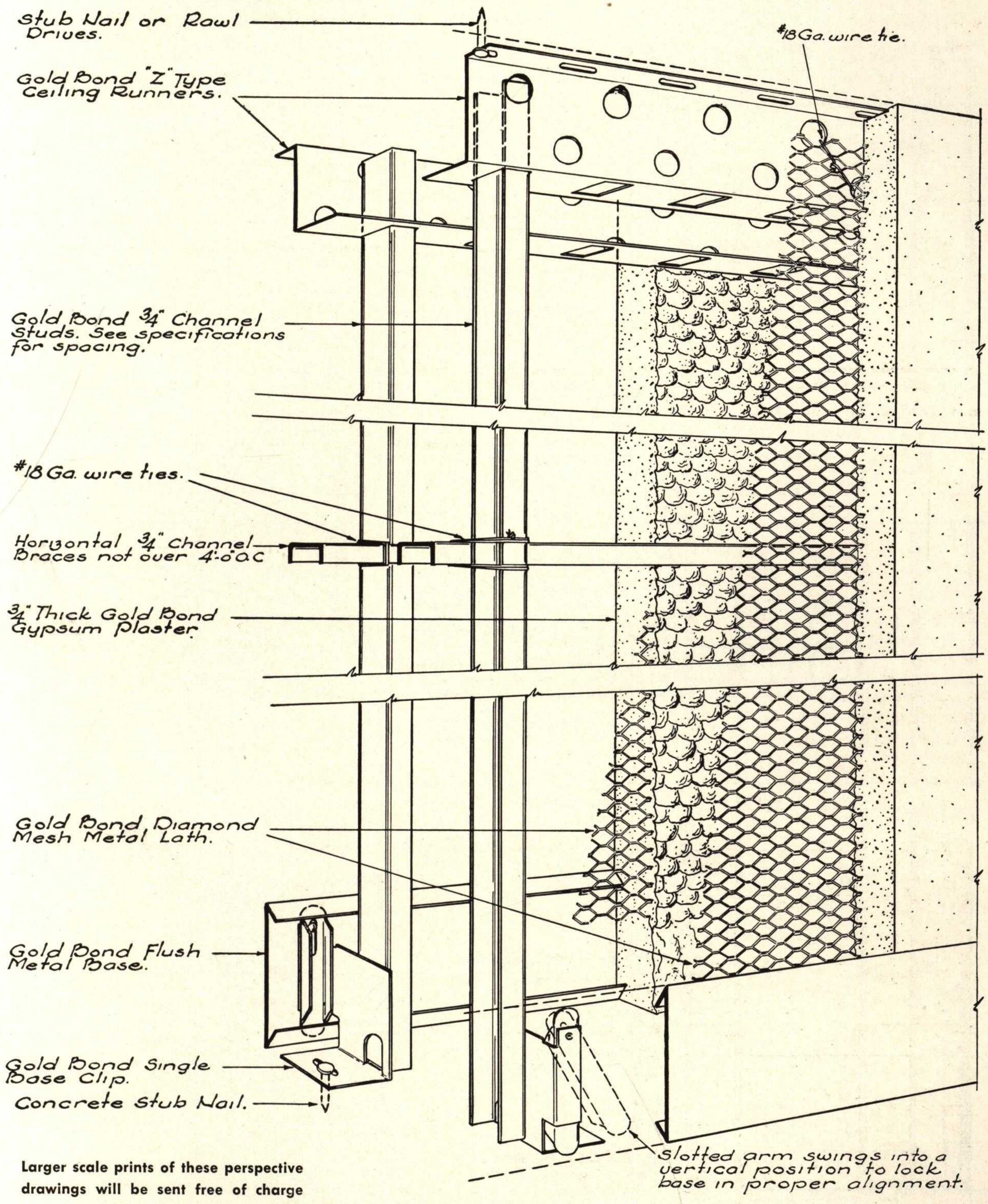
Wherever suspended ceilings are specified, the ceiling shall be lathed completely before erection of partition system. When Gold Bond Hollow Partitions are used in conjunction with suspended ceiling the Gold Bond "Z" Ceiling Runner may be omitted. The ceiling lath shall in this case be cut to receive ends of channels studs which must extend above the ceiling lath. A ¾ in. Cold Rolled Channel used for alignment shall be wired to underside of metal lath ceiling and channel studs wired to alignment channel.

Plastering

Follow specifications for plastering over Metal Lath as outlined in the Plastering Specifications section of this book.

Note: Plaster must be worked down behind metal base to assure full benefit of sound insulating qualities.

GOLD BOND HOLLOW WALL PARTITION SYSTEM


Stub Nail or Rawl Drives.
#18 Ga. wire tie.
Gold Bond "Z" Type Ceiling Runners.
Gold Bond 3/4" Channel Studs. See specifications for spacing.
#18 Ga. wire ties.
Horizontal 3/4" Channel Braces not over 4'-0" O.C.
3/4" Thick Gold Bond Gypsum Plaster.
Gold Bond Diamond Mesh Metal Lath.
Gold Bond Flush Metal Base.
Gold Bond Single Base Clip.
Concrete Stub Nail.
Slotted arm swings into a vertical position to lock base in proper alignment.

Larger scale prints of these perspective drawings will be sent free of charge to interested architects or engineers.

PERSPECTIVE OF HOLLOW WALL ASSEMBLY

GOLD BOND HOLLOW WALL PARTITION SYSTEM

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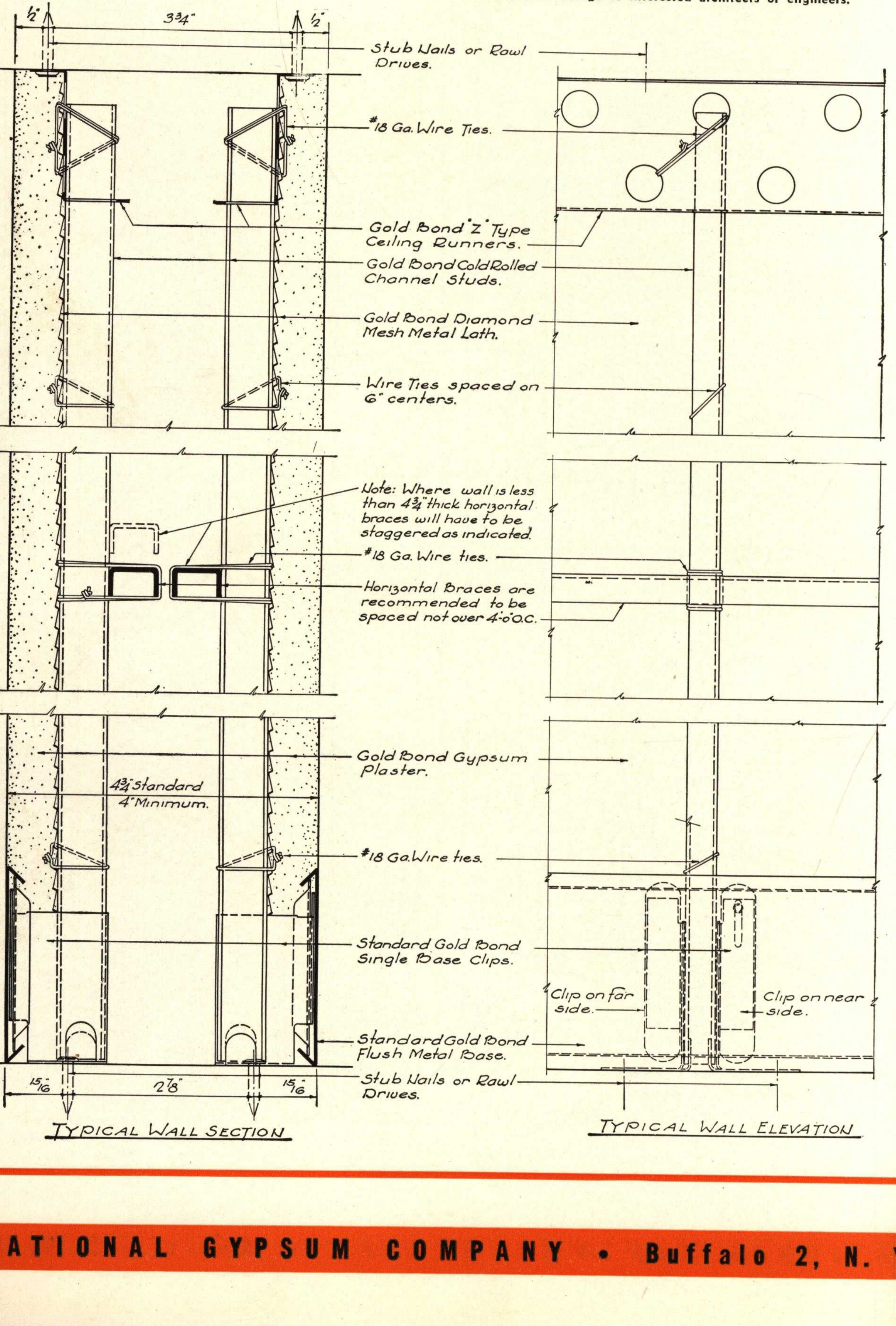
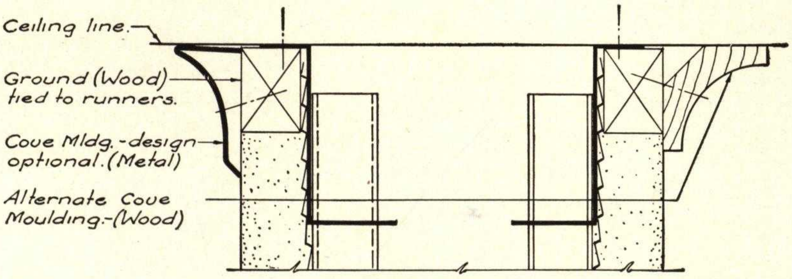

1/2"
3 3/4"
1/2"
Stub Nails or Rawl Drives.
#18 Ga. Wire Ties.
Gold Bond "Z" Type Ceiling Runners.
Gold Bond Cold Rolled Channel Studs.
Gold Bond Diamond Mesh Metal Lath.
Wire Ties spaced on 6" centers.
Note: Where wall is less than 4 3/4" thick horizontal braces will have to be staggered as indicated.
#18 Ga. Wire ties.
Horizontal Braces are recommended to be spaced not over 4'-0" O.C.
Gold Bond Gypsum Plaster.
4 3/4" Standard
4" Minimum.
#18 Ga. Wire ties.
Standard Gold Bond Single Base Clips.
Clip on far side.
Clip on near side.
Standard Gold Bond Flush Metal Base.
Stub Nails or Rawl Drives.
15/16
2 7/8"
15/16

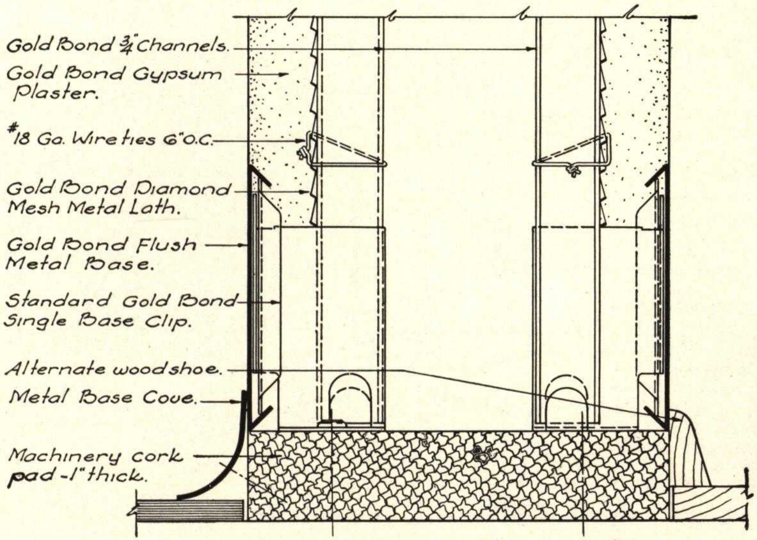
TYPICAL WALL SECTION

TYPICAL WALL ELEVATION

GOLD BOND HOLLOW WALL PARTITION SYSTEM

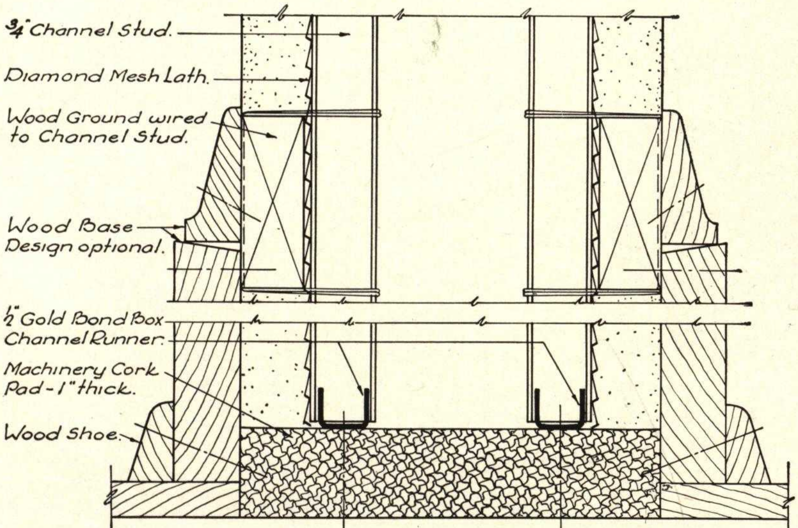

Ceiling line.
Ground (Wood) tied to runners.
Cove Mldg.-design optional. (Metal)
Alternate Cove Moulding.-(Wood)

ALTERNATE DETAIL AT CEILING


Gold Bond ¾" Channels.
Gold Bond Gypsum Plaster.
#18 Ga. Wire ties 6" O.C.
Gold Bond Diamond Mesh Metal Lath.
Gold Bond Flush Metal Base.
Standard Gold Bond Single Base Clip.
Alternate woodshoe.
Metal Base Cove.
Machinery cork pad-1" thick.

SOUND-RESISTANT HOLLOW WALL
(With Metal Base)

Full scale prints of all of these detail drawings will be sent free of charge to interested architects or engineers.


¾" Channel Stud.
Diamond Mesh Lath.
Wood Ground wired to Channel Stud.
Wood Base Design optional.
½" Gold Bond Box Channel Runner.
Machinery Cork Pad-1" thick.
Wood Shoe.

SOUND-RESISTANT HOLLOW WALL
(With Wood Base)

GOLD BOND HOLLOW WALL PARTITION SYSTEM

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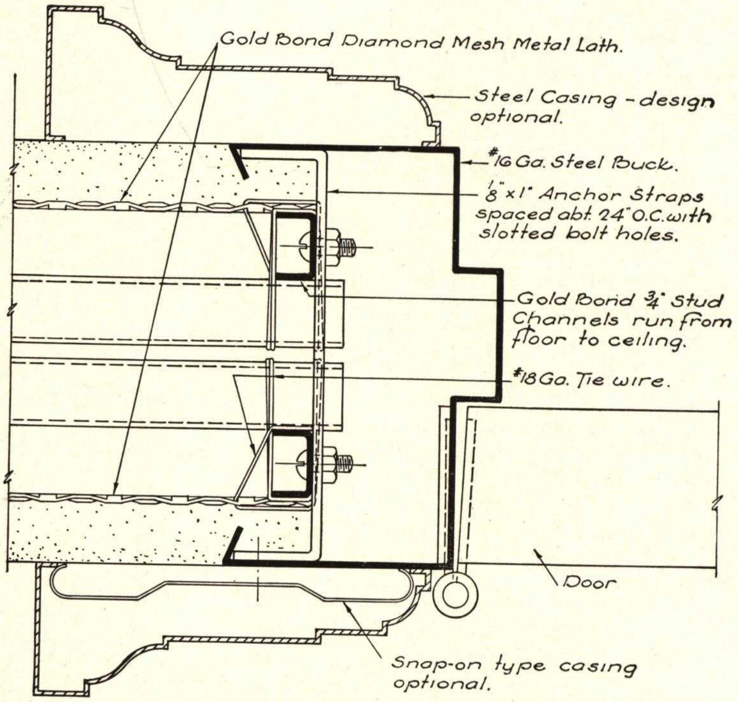
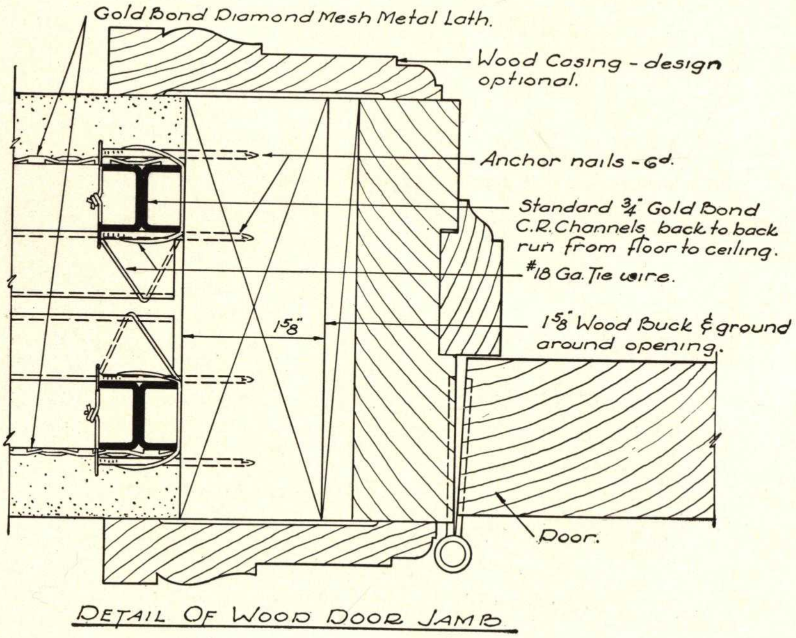

Gold Bond Diamond Mesh Metal Lath.
Steel Casing - design optional.
#16 Ga. Steel Buck.
1/8" x 1" Anchor Straps spaced abt. 24" O.C. with slotted bolt holes.
Gold Bond 3/4" Stud Channels run from floor to ceiling.
#18 Ga. Tie wire.
Door
Snap-on type casing optional.

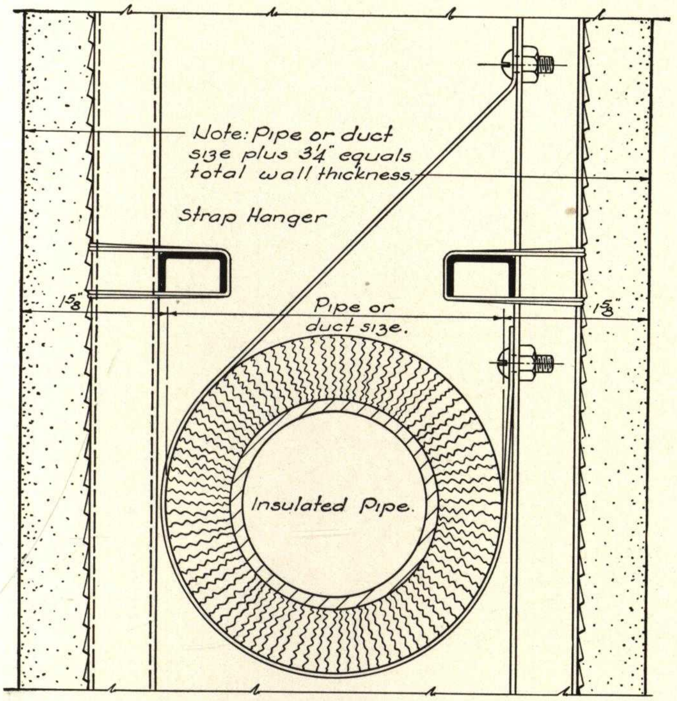
DETAIL OF STEEL DOOR JAMB


Gold Bond Diamond Mesh Metal Lath.
Wood Casing - design optional.
Anchor nails - 6d.
Standard 3/4" Gold Bond C.R. Channels back to back run from floor to ceiling.
#18 Ga. Tie wire.
1 5/8"
1 5/8" Wood Buck & ground around opening.
Door.

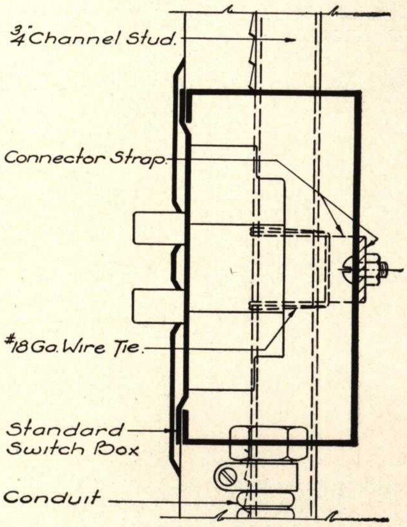
DETAIL OF WOOD DOOR JAMB

GOLD BOND HOLLOW WALL PARTITION SYSTEM

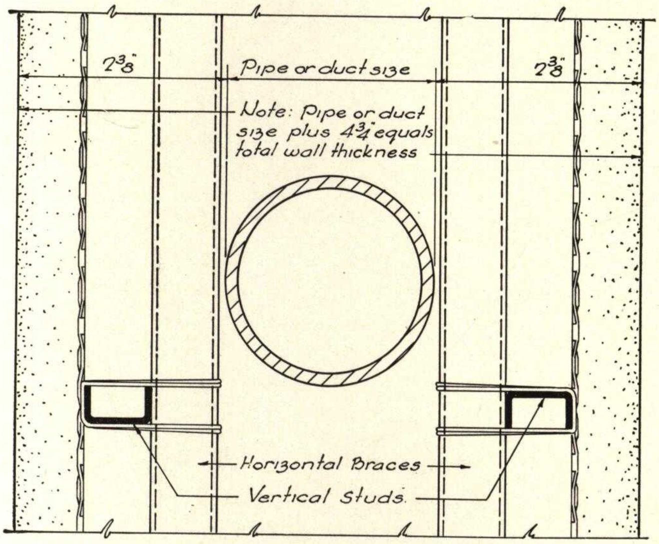
Full scale prints of all of these detail drawings will be sent free of charge to interested architects or engineers.


Note: Pipe or duct size plus 3¼" equals total wall thickness.
Strap Hanger
1⅝"
Pipe or duct size.
1⅝"
Insulated Pipe.

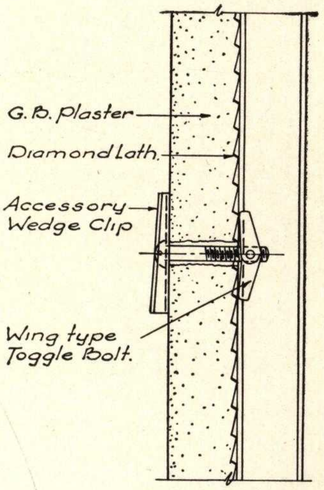
DETAIL FOR HORIZONTAL PIPES & DUCTS.


¾" Channel Stud.
Connector Strap.
#18 Ga. Wire Tie.
Standard Switch Box
Conduit

SWITCH BOX


2⅜"
Pipe or duct size
2⅜"
Note: Pipe or duct size plus 4¾" equals total wall thickness
Horizontal Braces
Vertical Studs.

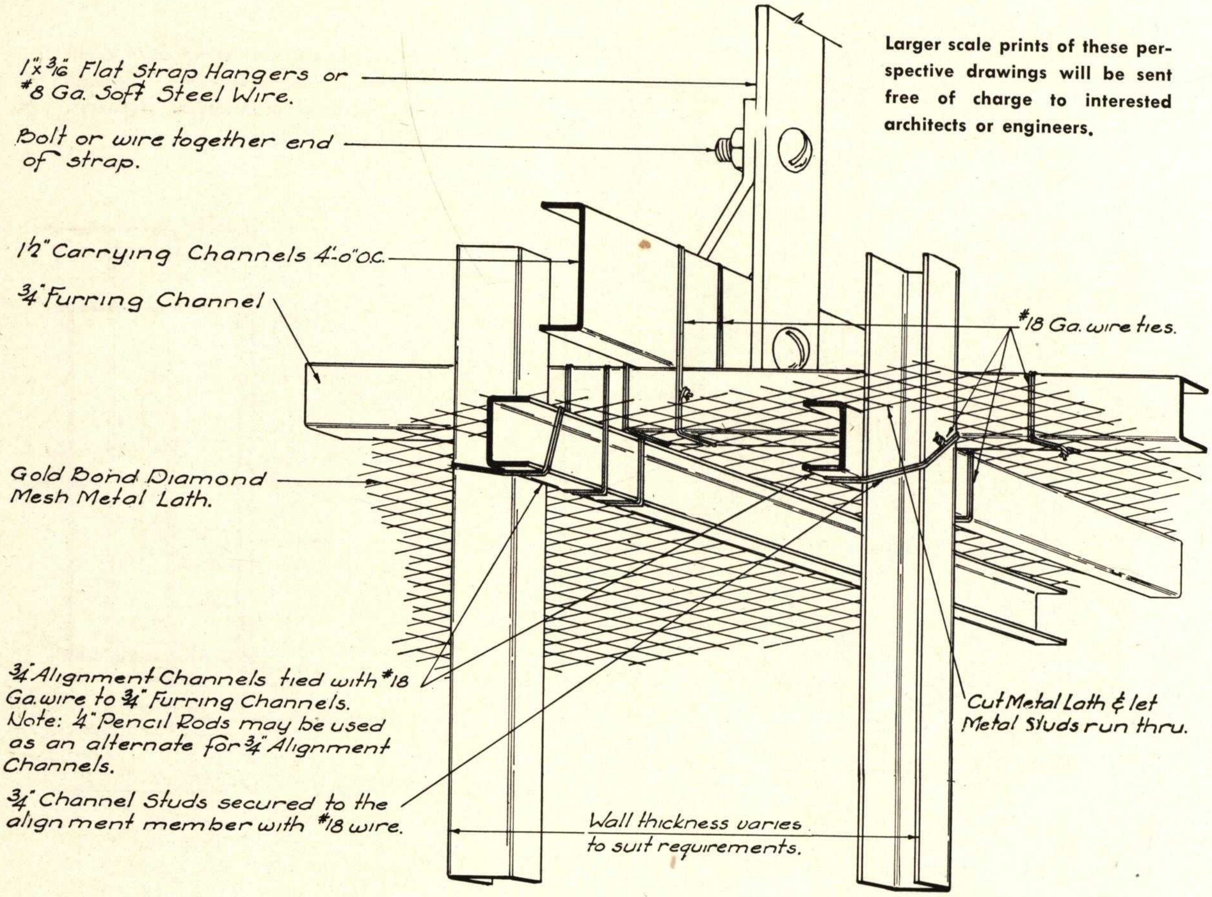
DETAIL FOR VERTICAL PIPES & DUCTS


G. B. Plaster
Diamond Lath.
Accessory Wedge Clip
Wing type Toggle Bolt.

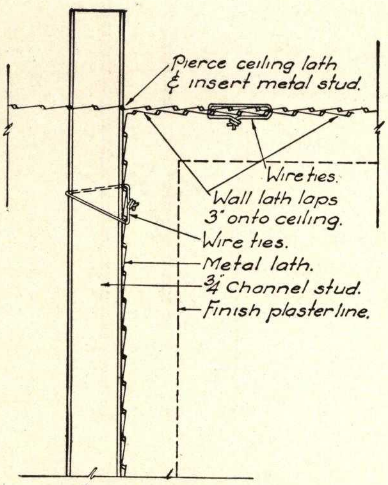
WALL CONNECTOR

GOLD BOND HOLLOW WALL PARTITION SYSTEM

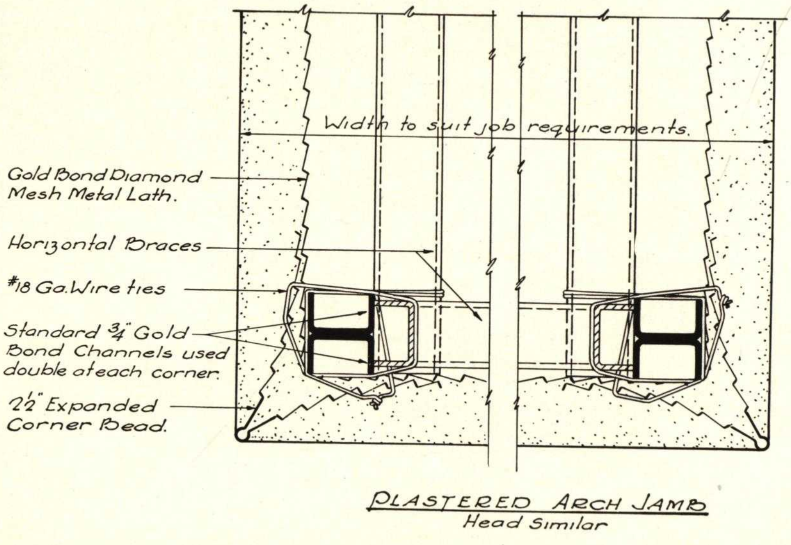
Larger scale prints of these perspective drawings will be sent free of charge to interested architects or engineers.


1"x 3/16" Flat Strap Hangers or #8 Ga. Soft Steel Wire.
Bolt or wire together end of strap.
1½" Carrying Channels 4'-0" O.C.
¾" Furring Channel
#18 Ga. wire ties.
Gold Bond Diamond Mesh Metal Lath.
¾" Alignment Channels tied with #18 Ga. wire to ¾" Furring Channels. Note: ¼" Pencil Rods may be used as an alternate for ¾" Alignment Channels.
¾" Channel Studs secured to the alignment member with #18 wire.
Cut Metal Lath & let Metal Studs run thru.
Wall thickness varies to suit requirements.

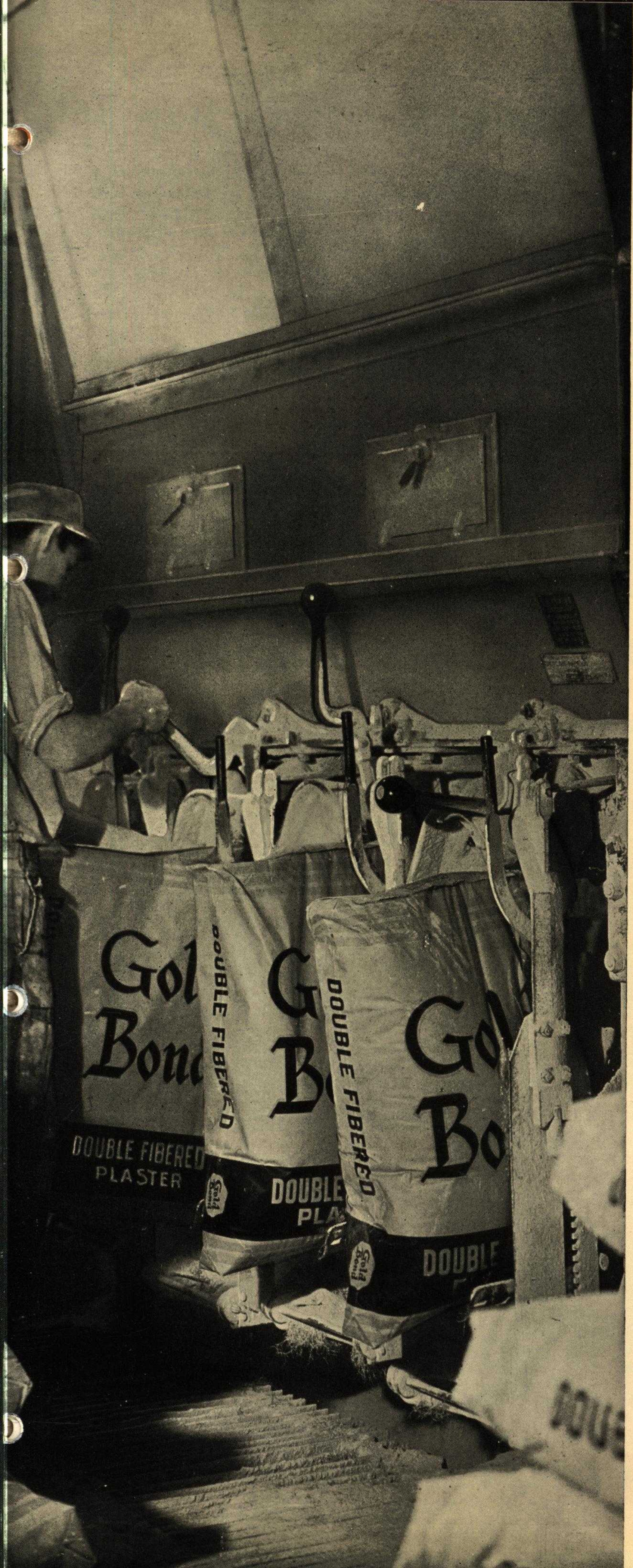
HOLLOW WALL & SUSPENDED CEILING WITH STUD ALIGNMENT CHANNEL


Pierce ceiling lath & insert metal stud.
Wire ties.
Wall lath laps 3" onto ceiling.
Wire ties.
Metal lath.
¾" Channel stud.
Finish plaster line.

ALTERNATE METHOD WITHOUT ALIGNMENT CHANNEL


Width to suit job requirements.
Gold Bond Diamond Mesh Metal Lath.
Horizontal Braces
#18 Ga. Wire ties
Standard ¾" Gold Bond Channels used double at each corner.
2½" Expanded Corner Bead.

PLASTERED ARCH JAMB
Head Similar


Gold Bond
DOUBLE FIBERED PLASTER
DOUBLE FIBERED
DOUBLE FIBERED
DOUBLE PLA
DOUBLE
Gold Bond

SECTION THREE

Gold Bond

GYPSUM PLASTERS AND LIME

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Pages 26-27
GYPSUM PLASTERS CHARACTERISTICS AND ADVANTAGES

Pages 28-29
GLOSSARY - COVERAGE TABLES

Pages 30-31
BASE PLASTERS

Page 32
FINISHING PLASTERS

Page 33
BEST BROS'. KEENE'S CEMENT

Page 34
FINISH AND MASON'S LIME

Pages 35-42
MASTER SPECIFICATIONS

CATALOG 11a/7, Pages 10-11
"MACOUSTIC" ACOUSTICAL PLASTER

At Left:

Mechanically controlled mixing and bagging equipment assures accurate blending and weighing of plaster without possibility of human error.

Gold Bond

GYPSUM PLASTERS

Quality-control supervision of every step in manufacturing assures uniform high quality.

NATIONAL GYPSUM owns vast mines and quarries in the richest gypsum sections of the country, insuring approximately a hundred years' supply of exceptionally pure rock used in making famous Gold Bond Plaster.

Purity Assured

Here in these mines and quarries daily tests are made to assure the constant purity of the rock—actual tests proving that the purity of the gypsum has a decided effect upon the strength and hardness of the finished wall. High purity also increases the coverage and smooth working qualities of the finished plaster.

Gold Bond spares no trouble or expense to obtain the purest gypsum rock, and then follows it by laboratory tests through every process of manufacture to the finished job.

Tested for Individual Markets

For this purpose—suiting the plaster to the particular market where it will be used—the Gold Bond laboratories are constantly testing specimens of sand from every part of the country where Gold Bond plaster is sold. Samples are continually being secured to meet changes in local conditions.

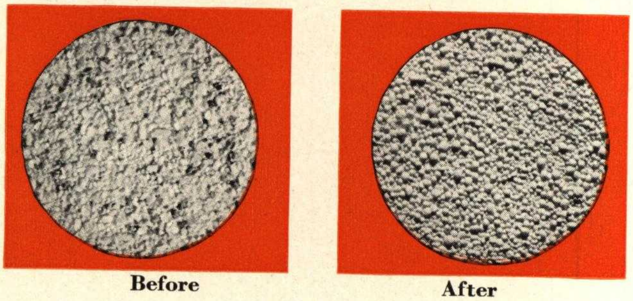
Before shipping, every batch of plaster is tested to meet the requirements of the particular sand of the vicinity into which the plaster is to be shipped. A somewhat costly process from the viewpoint of the manufacturer, but well worth the expense as it assures our customers of getting plaster that is particularly suited to their respective territories regardless of any unusual local conditions. Patented processes insure uniformity of performance under normal job variations and weather conditions.

Gold Bond Microplastic Plaster one of the greatest improvements in plaster history

Gold Bond Plasters have long been accepted as "standard" among the leading contractors of the country. Then in 1935, this enviable position was greatly enhanced by the introduction of a brand new plaster—Gold Bond Microplastic Plaster, produced after years of intensive research work.

This improved method of processing has resulted in a product that is practically foolproof as far as application is concerned. Plasticity or workability has been increased 100% with far greater coverage. The new Gold Bond Microplastic Plaster met with instant approval and experts considered this to be the greatest forward step in the development of plaster in many years.

What the Micron-Sizing Process Actually Accomplishes

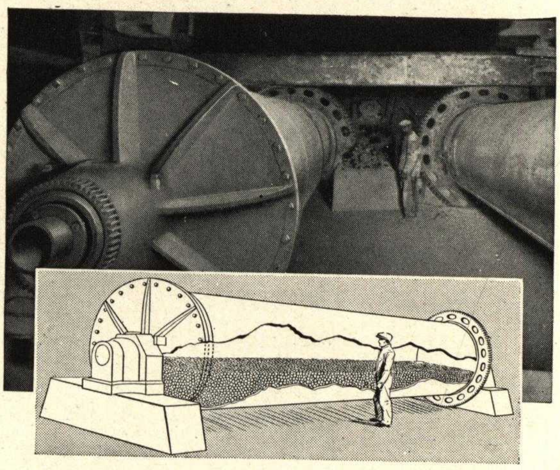


Before

After

Note the contrast between these microphotos. At the left the plaster is coarse and flinty, while at the right the plaster after the Micron-Sizing Process has been broken down into millions of tiny particles and then rolled into soft, felted balls.

New Equipment and New Processes Create New High Quality in Plaster



Above: Two of the huge revolving mills which regrind the gypsum particles into micron sizes and roll them into soft felted balls.
Below: An X-ray drawing of interior of mill showing the 100,000 manganese steel balls which do the pulverizing.

Micron Sizing Multiplies Plasticity

It is a well established scientific principle that in the setting of plaster a gelatinous plastic film is produced on the surface of the particles of calcined gypsum. Gold Bond, as one step in manufacture, regrinds the particles to micron sizes (1/25,000 inch). The enormous increase in area resulting greatly multiplies the bulky gelatinous smooth working qualities.

GYPSUM PLASTERS . . . CHARACTERISTICS AND ADVANTAGES

The high grade gypsum rock used in the manufacture of all Gold Bond Plasters is hydrated calcium sulphate, containing approximately 20% of chemically combined water. In the calcination process most of this water is driven off, producing "plaster of Paris" which is the base of all gypsum plasters. On remixing with water on the job, the material takes back the water driven off in calcination and crystallizes or sets to the original gypsum rock.

In making Gold Bond Gypsum Plasters, small amounts of other materials are added to the basic "plaster of Paris" to control the time of set, working qualities, type of use, and particular market conditions of territory to which it is shipped.

May Be Used on All Plastering Bases

One of the many advantages of gypsum plaster is that it may be used on all types of plastering bases in addition to masonry surfaces. It may be used on gypsum, wood or metal lath; clay, concrete or gypsum tile; cement or cinder blocks; brick, concrete or other standard masonry plastering surface.

Adhesion Qualities

The particularly strong adhesive quality of gypsum plaster has been practically demonstrated in tests at the U. S. Bureau of Standards. It was conclusively shown that it does not depend entirely on mechanical keys but bonds on actual suction or adhesive qualities.

Dries Quickly

The advantages of the quick set and rapid drying qualities of gypsum plaster are very important in the completion of a building as well as reducing overhead. The usual time for a hard set is from 2 to 6 hours and complete drying in about 36 hours depending on weather and the season of the year. After drying there is no further sweating or dampness.

Durability

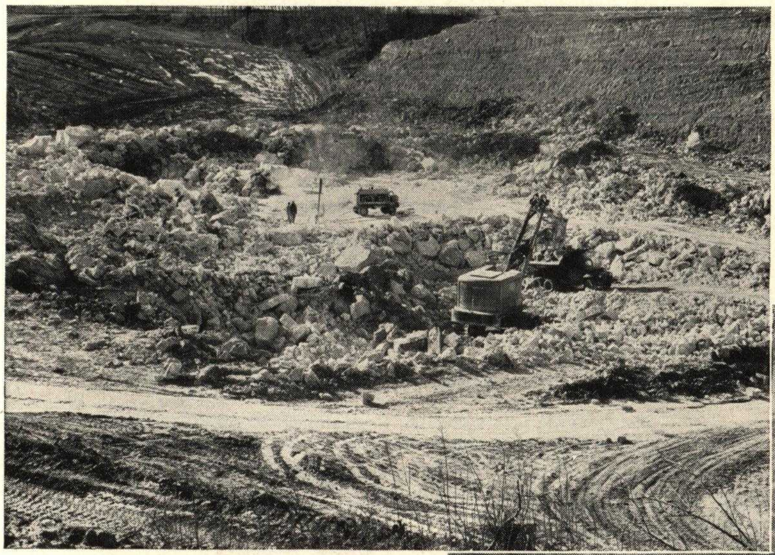
Gypsum plaster forms a hard, tough base for the application of finish coats or decoration. The tough base coats help the plaster wall to withstand rough usage which it may receive during the life of the building.

Low Coefficient of Expansion

After being applied, gypsum plaster remains inert and does not expand or contract materially even when subjected to fire. As it is made of gypsum it is absolutely incombustible.

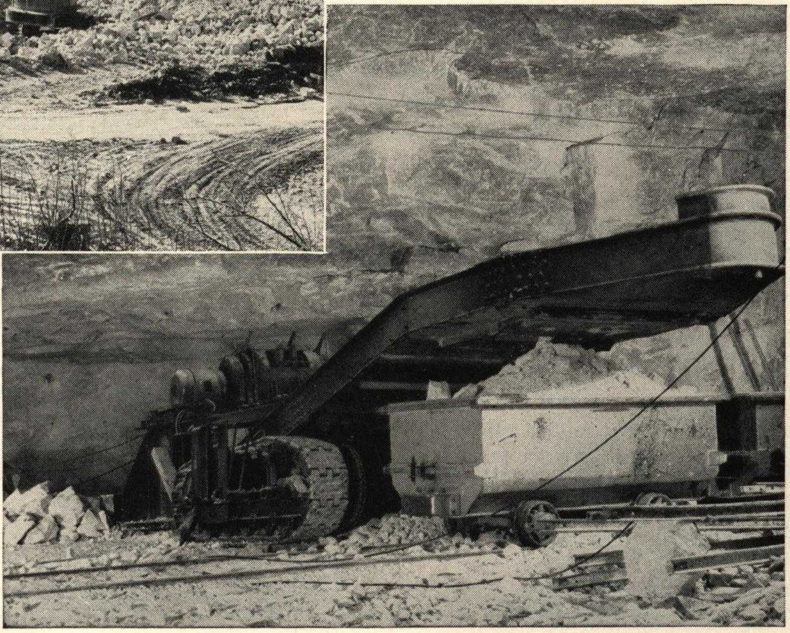
Packaging

Shipped usually in 100 lb. paper bags; and some specialty products in 250 lb. barrels.



At Left:

Gypsum Quarry at Fort Dodge, Iowa



At Right:

Gypsum Mine at Medicine Lodge, Kansas

Gold Bond

GYPSUM PLASTERS

GLOSSARY of common terms and information about types of gypsum wall plasters and their uses.

In view of the use of numerous local or descriptive names for the same type of plaster and widely varying market practices, it is felt that the following classification of plasters as to names and uses will be of considerable value.

BASE COAT PLASTERS

Gypsum Neat Plasters

These plasters constitute the bulk of tonnage of all types of gypsum plasters used. The term "Neat" designates plasters containing no sand, wood fiber or other aggregate. Gypsum Neat Plaster may contain either hair or sisal fiber in which case it is referred to as Fibered Neat Plaster or Fibered Cement Plaster.

Wood Fibered Plaster is never classified as "Neat" or Cement Plaster since the wood fiber is considered as an aggregate.

Gypsum Neat Plaster is called by the following names in many markets:

(a) Hardwall
(b) Patent Plaster
(c) Cement
(d) Compound
(e) Paristone
(f) Base Coat Plaster

Fibered and Unfibered Cement Plaster

Hair Fibered Plaster—

Hair Fibered Plaster may contain either hair or sisal fiber. Sisal fiber is recommended as being more satisfactory than hair in plaster.

Unfibered Plaster—

This designates only neat or cement plaster containing no fiber.

Uses for Gypsum Neat Plaster—

This material is generally used for plaster work where good plaster sand is easily available and it is economically advisable to mix sand on the job rather than use a mill-mixed material. Neat Plaster is formulated for use with sand in amounts covered in directions and *should never be used Neat*—i.e., without addition of sand.

Sanded Plaster

This material is the same as Gypsum Neat Plaster, except that a properly graded sand has been added at the mill in the proper amount for best plastering results. It has been called by many names listed under Gypsum Neat Plaster except with the term Sanded used in addition.

Uses for Sanded Plaster—

This material is used largely where good plastering sand is not easily available, where absolute exactness of proportioning of amount of sand is required, where facilities for mixing are limited, or job is not large enough to justify trouble of mixing sand on the job. Sanded plaster is used solely with addition of water on the job.

Wood Fiber Plaster

This type of plaster contains a finely shredded wood fiber and is made primarily for use with addition of water only on the job. In some cases, however, a small amount of sand (never over one part by weight) is added on the job. In some markets this material is known as Pulp Plaster.

Uses for Wood Fiber Plaster—

This material is used to a large extent for patch jobs, for work where an extremely hard wall is wanted, where base plaster is to be trowel finished, where sand is not easily available, etc.

Sanded Wood Fiber Plaster

This type plaster is on same general order as Wood Fiber Plaster except a small amount of specially graded fine sand is added. Its uses are the same as with Wood Fiber Plaster and it is used in certain markets where trade prefers a sanded wood fiber.

Concrete Bonding Gypsum Plaster

This is a specially formulated Wood Fiber Plaster to provide maximum bond to interior concrete surfaces. Ordinary gypsum or lime plaster does not bond properly to concrete surfaces. Water only is added in mixing on the job.

Bond Plaster

This is the same as Concrete Bonding Gypsum Plaster.

FINISH PLASTERS

Gauging Plaster

This is a specially ground calcined gypsum which may be either pure white or grey in color and quick or slow in set. Other names used to designate this material are as follows:

(a) Plaster of Paris
(b) Calcine
(c) Finish Plaster
(d) White Plaster (For pure white material only)
(e) Stucco

Uses of Gauging Plaster—

This material is always used in connection with lime putty finish and is the essential ingredient which provides an initial set and prevents the slow setting lime from shrinking, checking and peeling before the set of lime itself takes place. The failure to use the proper amount of Gauging Plaster is the cause of most failures on lime putty finish jobs.

The type of Gauging used depends on trade practices in each locality. The following types of material are used:

(1) White Gauging—Quick Set
(2) White Gauging—Slow Set
(3) Grey Gauging—Quick Set
(4) Grey Gauging—Slow Set

GYPSUM PLASTERS . . . GLOSSARY OF TERMS

Moulding Plaster

This is made from selected rock and specially prepared for requirements of its use. This is also sometimes called Plaster of Paris. It is used for plaster moulds, ornamental plaster work of all kinds and can be used as substitute for quick set Gauging Plaster. It is generally made as a pure white plaster but in a few localities Grey Moulding is used for special purposes.

Prepared Trowel Finishes

These plasters are gypsum finish plasters manufactured to avoid the problems involved in use of ordinary lime putty finish. They contain no lime but various ingredients are added to produce exceptionally easy working and spreading qualities. Water only is added on the job. They are also known as

(a) Smooth Trowel Finishes (b) Gypsum Trowel Finishes

Uses of Prepared Trowel Finishes

These finishes are available as a substitute for lime putty finish whenever desired. They have replaced lime putty finish in some markets. They have the advantage of perfect bond to base, quick setting and freedom from danger of lime burn in decoration. These finishes can be safely decorated in any manner as soon as dry . . . They are available in both grey and white.

Sand Float Finishes

These are also prepared gypsum finish with addition of fine sand. For use over gypsum base coat. They are used in markets where the semi-rough surface of a sand float finish is desired. As name implies these materials are "floated," not trowel finished. Furnished in grey color.

Keene's Cement

This is an exceptionally dense gypsum finish, fundamentally different from all other types of gypsum plasters. Made at Medicine Lodge, Kansas, by Best Brothers, the original and largest manufacturer of Keene's Cement in the country and now operated as a division of National Gypsum Company.

Keene's Cement is made in two different styles with various setting times as described on page 33.

Uses of Keene's Cement

Keene's Cement is used wherever extremely dense walls are required, such as imitation tile finishes in bathrooms and kitchens or any place where the walls will be subjected to unusual abuse. Also used as a finish coat instead of lime putty, for castings and running moulds, backing up artificial marble, facing artificial marble and for numerous ornamental plastering effects.

APPROXIMATE YARD COVERAGE PER TON ON VARIOUS PLASTERING BASES

TYPE OF PLASTER	GYPSUM LATH	GYPSUM INSULATING LATH	PAINTED METAL LATH	WOOD LATH	GYPSUM TILE	BRICK AND CLAY TILE CINDER BLOCK	CONCRETE SURFACES	BAGS TYPE WEIGHT, LBS.
NEAT*	225-240 Sanded 1-2	225-240 Sanded 1-2	105-135 Sanded 1-2	180-210 Sanded 1-2	235-255 Sanded 1-3	165-200 Sanded 1-3	Use Bond Plaster	Paper 100 lbs.
SANDED	75-80	75-80	35-45	60-70	65-70	45-55	Use Bond Plaster	Paper 100 lbs.
WOOD FIBERED	115-120 Water only no sand	115-120 Water only no sand	55-65 Water only no sand	90-100 Water only no sand	....	....	Use Bond Plaster	Paper 100 lbs.
BOND		90 to 120 sq. yds., depending on smoothness of surface of concrete						Paper 100 lbs.
GAUGING PLASTER		1600 sq. yds. with 2 tons of hydrated lime						Paper 100 lbs.
PREPARED SAND FLOAT FINISH		250-275 sq. yds.						Paper 100 lbs.
PREPARED TROWEL FINISH		300-400 sq. yds.						Paper 100 lbs.
KEENE'S CEMENT		400-500 sq. yds.						Paper 100 lbs.

*Sanded 1-2 equals 1 part of plaster 2 parts sand by weight. Sanded 1-3 equals 1 part plaster 3 parts sand by weight.

Gold Bond

GYPSUM PLASTERS

BASE PLASTERS . . . . A full line of Fibered and Unfibered, Sanded, Wood Fibered, Bonding Plaster.

WITH regard to A.S.T.M. specifications, NATIONAL GYPSUM COMPANY guarantees any Gold Bond Gypsum Plaster product to have about double the strength requirements and to exceed by a wide margin the purity required for any special plaster product in the A.S.T.M. specifications and also every other detail of these specifications. This also applies to Federal specifications.

GOLD BOND GYPSUM NEAT PLASTER

Unfibered or Fibered with Hair or Sisal

Gold Bond Cement Plaster is "neat," not sanded, the sand being added at the job. Each shipment is prepared especially for the locality to which it is shipped and for the sand used in that locality. Fibered with hair or sisal fiber as ordered.

When mixed with sand it spreads well with a uniform working quality and with satisfactory results on the finished wall. On account of the purity of the gypsum it assures the maximum in sand carrying capacity, bulk and workability.

Note: Cement plaster should never be used neat—i. e., without adding sand.

Proportions of Sand for Various Bases

After thoroughly mixing with sand, hoe plaster into water and bring to a uniform mix of proper consistency.

Scratch Coat on Gypsum, Wood and Metal Lath—Mix 1 part plaster with 2 parts by weight of dry sand.

On Brick and Gypsum or Clay Tile—Use 1 part plaster to 3 parts by weight of sand.

Brown Coat (Second) for All Plaster Bases—Mix 1 part of plaster to 3 parts of sand.

Full ½ in. grounds should be used for best plaster work.

Application on Various Bases

On Gypsum Lath—Do not wet lath. Apply in 2 coats, scratching well in to fill joints between the lathing units. Brown coat to be darbied lightly and water used sparingly.

On Wood Lath—Soak lath 24 hours before and wet again an hour or two before plastering. Apply in 2 coats using sufficient pressure on scratch coat to obtain good key. Brown coat to be darbied lightly and water used sparingly.

On Metal Lath—Apply in 2 coats. Scratch coat to lightly cover lath and fill mesh. Scratch first coat and allow to set. Then apply brown coat, darby lightly and use water sparingly.

On Brick and Gypsum or Clay Tile—Soak brick or clay tile walls and sprinkle gypsum tile lightly before application of plaster. Apply in 2 coats. Darby brown coat lightly and use water sparingly.

APPROXIMATE COVERING CAPACITY AND SANDING

PLASTER BASE	GYPSUM LATH	WOOD LATH	METAL LATH	BRICK AND CLAY TILE	GYPSUM TILE
Coverage	225-240	180-210	105-135	165-200	235-255
Mix	1 plaster 2 sand	1 plaster 2 sand	1 plaster 2 sand	1 plaster 3 of sand	1 plaster 3 of sand

Coverage Figures are in square yards per ton.

GOLD BOND SANDED GYPSUM PLASTER

Factory mixed with specially graded sharp sand

Gold Bond Sanded Plaster is the same as cement plaster but is accurately factory mixed and sanded with especially selected and graded sharp sand. It requires only the addition of water and mixing to be ready for use. It is useful for localities where good local sand is difficult to obtain or where an accurate mix is wanted.

Gold Bond Sanded Plaster is also desirable for use during the winter as it eliminates the need for drying sand which is wet and frozen or for trying to secure unfrozen sand.

Gold Bond Sanded Plaster is also useful for remodeling and repair work as it may be mixed inside the building.

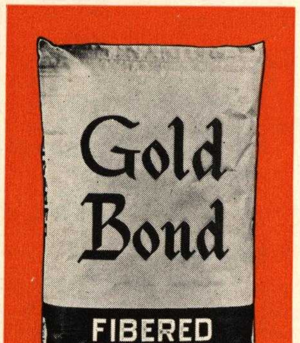
Application on Various Bases—Gold Bond Sanded Plasters are applied to the various plastering bases in the same manner as for Cement Plaster (see description above).

Mixing--Add nothing but water, hoeing plaster into water and mixing thoroughly. First mix thin, then add dry material to bring to proper consistency.

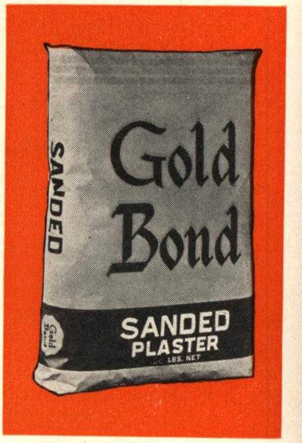
APPROXIMATE COVERAGE—GOLD BOND SANDED PLASTER

PLASTER BASE	GYPSUM LATH	WOOD LATH	METAL LATH	BRICK AND CLAY TILE	GYPSUM TILE
Coverage	75-80	60-70	35-40	45-55	65-70

Coverage Figures are in square yards per ton.



Neat Plaster Bag



Sanded Plaster Bag

GOLD BOND WOOD FIBERED GYPSUM PLASTER

Used for Base Coats Except on Brick and Gypsum and Clay Tile

Unsanded or "Neat" Wood Fibered Plaster is a gypsum plaster containing finely shredded wood fiber and requires only the addition of water to be ready for use. It does not require sand but in some localities 1 part, by weight, of sand is added.

The wood fibered plaster when used unsanded avoids dangers of over-sanding and works and spreads freely and easily. The plaster is about two-thirds lighter in weight than sanded plaster. The wood fiber acts as a reinforcing and produces a dense, tough, strong and durable base, especially for troweling. It is superior in fire resisting and sound deadening qualities to sanded plasters and will stand up where strains and vibrations are encountered. It saws like wood. It is especially adapted for winter work and alterations as it is easily handled.

Sanded Wood Fibered Plaster—Same as unsanded but is shipped factory mixed with proper amount finely graded sand.

Mixing for Application on Various Bases

Hoe plaster into water and allow to soak for 10 to 20 minutes, then mix to the proper consistency.

Scratch Coat—Use "Neat" or Sanded for wood, gypsum lath and metal lath.

Brown Coat—Use "Neat" or Sanded for wood and gypsum lath and Sanded for metal lath.

Note: Do not use either on Brick and Gypsum or Clay Tile.

Application on Various Bases

On Gypsum Lath—Do not wet lath. Apply in coats scratching well to fill joints between the lathing units and scratch surface. Allow first coat to set and dry; then apply brown coat and broom surface before it sets.

On Wood Lath—Soak lath. Apply in coats, applying scratch coat with sufficient pressure to obtain proper key and scratch surface. Apply brown coat and broom surface before it sets.

On Metal Lath—Apply in two coats, applying scratch coat, of stiffer consistency, to cover lath and fill mesh. Apply brown coat and broom surface before it sets.

On Brick and Gypsum or Clay Tile—

Note: Wood Fibered Plaster is not recommended for use on these bases.

APPROXIMATE COVERAGE—GOLD BOND WOOD FIBERED PLASTER

PLASTERING BASE	GYPSUM LATH	WOOD LATH	METAL LATH	BRICK AND CLAY TILE	GYPSUM TILE
Coverage	115-120	90-100	55-65	Not recommended on these bases	
Mix	Unsanded add water only	Unsanded add water only	Unsanded add water only		

Coverage Figures are in square yards per ton.

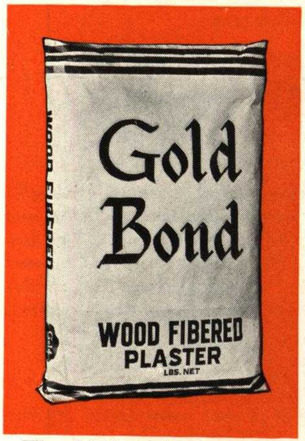
GOLD BOND CONCRETE BONDING GYPSUM PLASTER

For Base Coats on Interior Concrete Surfaces

This plaster is made especially to bond to concrete surfaces, on which ordinary gypsum or lime plasters will not adhere properly. It is used for scratch and brown coats. Only water should be added on the job. Do not use with sand.

All surfaces of concrete must be dry, absolutely clean, free from oil and efflorescence and should be roughened if the surface is troweled smooth.

The plaster should be applied in two thin coats just thick enough to make a smooth wall and not over 1/8 in. total thickness. Any plaster finish may be used over the bonding plaster. The finished surface should not be decorated for a year in order to allow time for any moisture in concrete to work out.



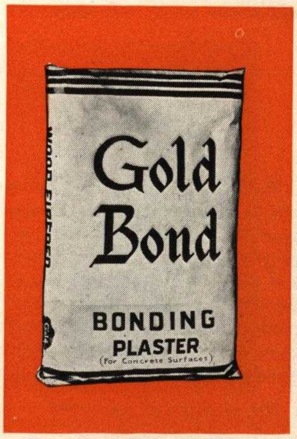
Wood Fibered Plaster Bag

Mixing—Add nothing but water and hoe plaster into the water, allowing to soak for 10 to 20 minutes, then mix thoroughly to a smooth creamy consistency.

Application—Apply in 2 coats—First coat shall be scratched on as thin as possible, scratched and allowed to dry. Apply second coat just thick enough to level up inequalities, with total thickness of both coats, 1/8 in. minimum, 3/8 in. maximum. Scratch the surface of bond plaster thoroughly to provide mechanical key for finish.

Covering Capacity

Approximately from 90 to 120 sq. yards per ton, depending on roughness of concrete and thickness applied.



Bonding Plaster Bag

Gold Bond

GYPSUM PLASTERS

FINISHING PLASTERS . . Gauging, Prepared Trowel and Sand Float finishes . . . . Moulding Plaster.

NATIONAL GYPSUM COMPANY guarantees any Gold Bond Gypsum Plaster product to have about double the strength requirements and to exceed by a wide margin the purity required for any special plaster product in the A.S.T.M. specifications and also every other detail of these specifications. This also applies to Federal specifications.

GOLD BOND GYPSUM GAUGING PLASTER

For Gauging Gold Bond Lime Putty Finish

Gauging plaster is a specially selected, ground, calcined gypsum used with lime putty plasters to quicken the set of the lime putty and prevent checking of lime finish. Is uniformly ground to a fineness to insure easy mixing and working qualities. Also known as Plaster of Paris. Supplied in following types:

Quick Set or Slow Set

Gold Bond Super White (White). Gold Bond Sapphire (Grey).

Directions for Mixing

Use as directed under Gold Bond Finishing Lime, Page 34.

Covering Capacity

Under normal conditions one ton of Gauging Plaster to two tons of hydrated lime by weight will cover approximately 1600 square yards.

GOLD BOND PREPARED GYPSUM TROWEL AND SAND FLOAT FINISHES

For White or Sand Float Gypsum Finishes Over Gypsum Base Coats

These prepared gypsum plasters are for use as finish over gypsum base coats in place of lime putty finish. They make a perfect bond with the gypsum plaster base coats. They have exceptionally easy working and spreading qualities, set quickly and walls may be decorated in any manner as soon as they become dry. There is no danger of lime burns in decorations.

Sand Float Finishes are made with clean sharp silica sand.

Mixing and Application

Mixing—Hoe plaster into water (adding 2 parts of plaster to 1 part of water by volume) and allow to soak for 10 minutes. Mix thoroughly to produce a smooth creamy consistency and add water until very thin.

Trowel Finish—Base coat must be absolutely dry before finish is applied. If suction is too great sprinkle base with water. Apply in three coats, the first coat very thin, well scratched into the surface. Allow to draw for a few minutes, then lay on second coat and level off. Apply third coat very thin, filling in all imperfections and allow to draw for a few minutes. Then trowel to smooth finish, applying water sparingly with brush and complete troweling before plaster sets.

Sand Float Finish—Gypsum base coat must be hard and about half dry before finish is applied. Trowel on and finish with a float to true and even surface, using water sparingly from a damp brush and complete before finish sets.

(Not available in all areas at present time.)

GOLD BOND GYPSUM MOULDING PLASTER

Gold Bond Moulding Plaster (Plaster of Paris) is made for use in ornamental plaster work. It is made from selected gypsum rock of greatest purity and whiteness and undergoes special preparations for the purposes for which it is used. The purity of the gypsum deposits of the company allows the production of moulding plaster of the very finest quality. It makes an especially smooth working plaster of uniform set. It is ground finer than other gypsum plasters and permits a finer surface and greater freedom from pin holes.

On account of its hardness and great strength after setting it is used for plaster moulds and ornamental work of all kinds. The plaster sets with little heat resulting in low expansion and contraction, especially desirable when used in moulds. The low temperature does not affect glue or gelatine moulds. It is used for running mouldings, cornices and ornamental use of a similar type as it can be worked so smoothly and produces a perfect, smooth surface.

Mixing Directions

Mix with water only and bring to proper consistency for use.

Gold Bond

BEST BROS. KEENE'S CEMENT

The finest and whitest gypsum products made. For wall finishes where extra durability is needed.

Gold Bond
BEST
BROS
KEENE'S
CEMENT
COMPANY
MEDICINE LODGE, KANSAS
BEST BROS. DIVISION OF
NATIONAL GYPSUM CO.

Best Bros.' Keene's Cement is the whitest finish plaster obtainable and produces a wall with extreme durability. Because of its density it excels for wainscots in kitchens and baths and for the finish coat in auditoriums, public buildings and wherever walls will be subjected to unusually hard wear or abuse. For running moulds and ornamental plastering effects, Best Bros.' Keene's Cement is the "old standby" of plasterers because of its unmatched high quality and uniformity. Two products as follows:

Best Bros.' Keene's "Regular"—Standard grade for ordinary plastering. Good color and fairly coarse grind; mixes readily with lime putty; tensile strength of over 600 lbs. per sq. in. in 7 days; an initial set of 2 hours and a final set of 4 hours.

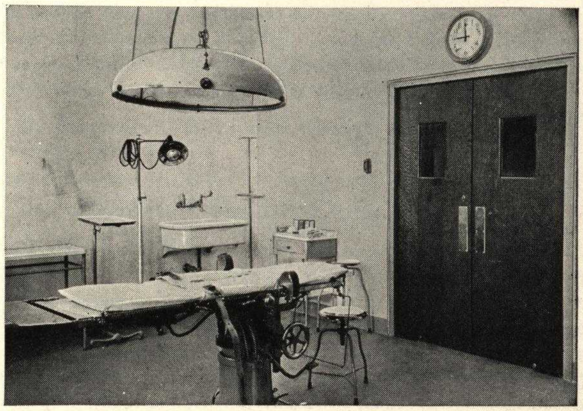
Best Bros.' Keene's "Fast Finish"—A smooth finish coat, and made to set up more quickly than "Regular" grade when mixed with lime putty. Designed to overcome the long interval of time previously necessary between application and final troweling of a Keene's Cement finish. Ground the same as "Regular" grade; has a job set of 2 hours; tensile strength over 500 lbs. per sq. in.

(Not available in all areas at present time.)

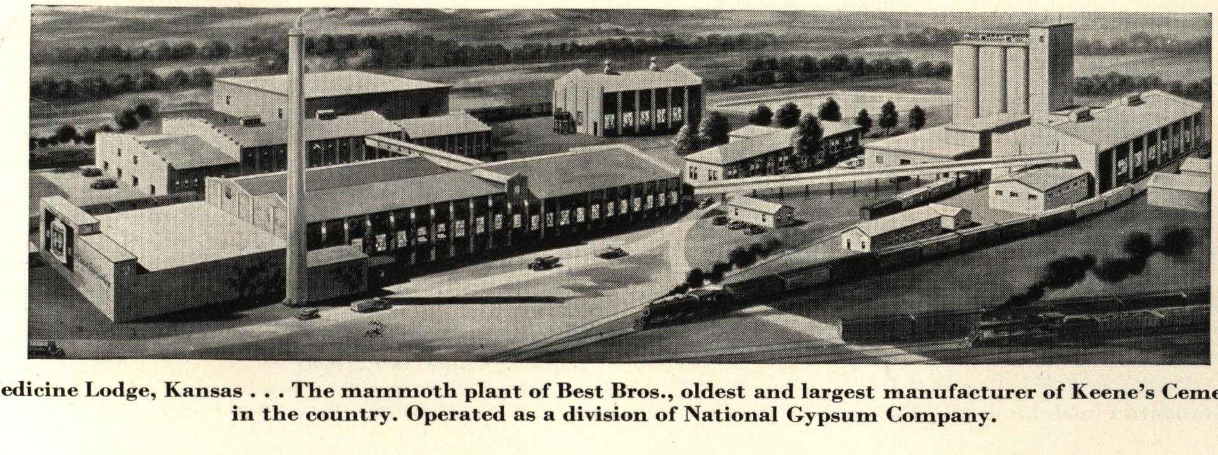
Calcined at High Temperature

In making Best Bros.' Keene's Cement the rock is calcined at a temperature many hundreds of degrees higher than that used in making standard hardwall gypsum plaster. Calcination at this higher temperature drives out the last 5% of the water of crystallization and leaves a stable material which has no affinity for atmospheric moisture. Breaking down and remixing Best Bros.' Keene's Cement does not interfere with the set since a catalytic agent has been added to act as a nucleus for the process of crystallization.

Department of Commerce, Washington, D. C., Best Bros.' Keene's Cement used for 3¾ miles of corridors in this building because of its greater durability.



Hospital rooms must be able to "take it." Best Bros.' Keene's Cement is invariably the choice of architects and contractors.



Medicine Lodge, Kansas . . . The mammoth plant of Best Bros., oldest and largest manufacturer of Keene's Cement in the country. Operated as a division of National Gypsum Company.

Gold Bond

FINISH LIME

The perfect white coat for gypsum plaster. Made from selected quality Ohio Dolomitic Limestone.

Finest Dolomite Deposits

The very finest known dolomite limestone deposit in the world is in the northwestern Ohio fields, a few miles south of Toledo. Most of the finish lime for the entire United States comes from producers located here, within a radius of about five miles.

Gold Bond Finish Lime is produced in National Gypsum Company's Luckey, Ohio plant in this area and in purity it ranks with the finest produced in this top quality field.

Dolomite Limestone Quality

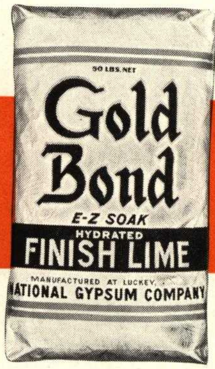
Chemically pure dolomite limestone contains 45.5% magnesium carbonate and 54.5% calcium carbonate. A.S.T.M. specifications require a 95% minimum oxides of the two combined. The Gold Bond deposits average between 98% and 99%, containing 55.56% calcium carbonate and 43.41% magnesium carbonate. It is the magnesium carbonate which, when properly burned, produces the plasticity and easy slip or working qualities of a building lime. It is due to this quality of plasticity that dolomite lime is so favored by the trade. Lime of high calcium content is not so easily worked as Ohio dolomite lime.

Machine Controlled Burning

Of vital importance in the production of good finish lime is the proper burning of the magnesium carbonate. As calcium carbonate and magnesium carbonate require widely different temperatures to convert them into oxides by burning, it requires very precise regulation of heat. National Gypsum Company has patented and installed apparatus which controls the burning automatically so that overburning is practically impossible. Overburned lime is tough and hard working, has no "slip" and will not hold its water against the suction of the wall.

Gold Bond
LBS. NET – HYDRATED
FINISH LIME
MANUFACTURED AT LUCKEY, OHIO
NATIONAL GYPSUM CO.

Standard Finish Lime



E-Z Soak Finish Lime

Scientifically Controlled Hydration

The process of hydration is absolutely and automatically controlled by special equipment. A definite percentage of water, added to the lime as it comes from the kiln, combines with the calcium and magnesium oxides to form hydrates. This produces the Gold Bond Standard Finish Lime (called Type N).

E-Z Soak Finish Lime

Gold Bond E-Z Soak Finish Lime (called Type S) is produced by hydrating the burned lime in an autoclave under steam pressure. By this method the lime is 92% hydrated so that, when desired, it may be used immediately after mixing with water and screening. May also be soaked overnight before use. Standard Finish Lime must be soaked overnight before it can be used.

Mixing Gold Bond Finish Lime—Put 6 gallons of water into the box for each 50 lb. sack of lime to be soaked. Sprinkle or screen the lime into the water evenly. Cover and let stand overnight. E-Z Soak Lime may be soaked overnight as above, or it may be mixed and used immediately. In application, mix 3 parts lime putty and 1 part Gold Bond Gypsum Gauging Plaster by volume.

Coverage—Under average conditions, the proportions specified should cover about 500 to 700 sq. yds. per ton of lime.

GOLD BOND MASON'S LIME

High plasticity, easy working lime for use with lime cement and sand, lime and sand mortars and for increasing the workability and watertightness of Portland cement concrete.

Increases the plasticity, adhesive properties and sand-carrying capacity of mortars and the strength and watertightness of the finished structures.

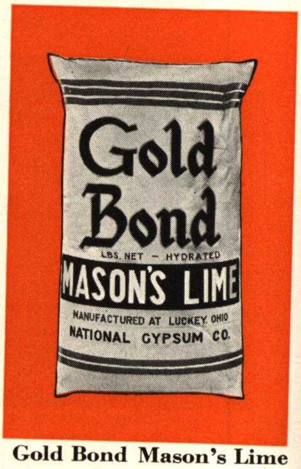
Commonly used in the following proportions:

Lime Mortar—2 parts lime, not more than 1 part Portland cement, not more than 6 parts sand.

Cement-Lime Mortars—(General) 2 parts lime, 1 part Portland cement, not more than 9 parts sand.

Cement-Lime Mortars—(Below Grade) 1 part lime, 1 part Portland cement, not more than 6 parts sand.

Lime in Concrete—Usually 1 part lime to 9 parts Portland cement. (Plus aggregates).



Gold Bond Mason's Lime

Gold Bond

MASTER SPECIFICATIONS

INTERIOR LATHING AND PLASTERING . . Application of plaster bases, mixing and applying plaster coats.

GENERAL NOTES

It is intended that the following specifications will cover practically all conditions which are usually met with in ordinary construction. Only the paragraphs applying to the particular type of job should be selected and used by the architect. Special lathing bases are not included and if these are used the method of application and use of plaster should follow the recommendations of the manufacturer.

Consulting Service on Lathing and Plastering

The National Gypsum Company has over two hundred representatives located throughout its territory who will be glad to consult with architects and lathing and plastering contractors on any lathing or plastering problems which may arise. This is in addition to the technical laboratory and research department located at the Clarence Center, N. Y., plant, which may be called upon at any time for technical information.

New and Old Work

The following specifications are written only for new work. For alteration work the clauses will have to be altered to cover such work especially in regard to where old and new work join.

SECTION 1 — LATHING AND PLASTERING SPECIFICATIONS

Note: (a) Acoustical Plaster—See "Sound Control Products" for specifications on Gold Bond Macoustic Plaster.
(b) If trade practice requires separate specifications for lathing and for plastering, the specification should be written accordingly.

1. General Conditions

The General Conditions of the Contract of the American Institute of Architects (current edition) shall form a part of this specification. (If the A.I.A. Standard Form is not used then refer to the one used.)

2. Scope

2–1. This contractor shall furnish all materials, labor, scaffolding and staging which will be required to satisfactorily complete the lathing and plastering work to be executed as hereinafter described or indicated on the contract drawings or schedules.

3. Extent of Work—Furring, Lathing and Plastering

3–1. All Metal Furred or Suspended Ceilings

Note: Wood-furred or wood-hung ceilings should be specified under carpentry.

3–2. All metal wall furring and miscellaneous metal furring

3–3. All metal stud partitions

3–4. All lathing

3–5. All interior plastering including Keene's Cement as follows:

Note: Here describe exceptions and amplifications in regard to lathing and plastering or refer to schedule of finishes and drawings.

- **a.** Note where plaster is to be omitted.
- **b.** Note where one or two coat plaster is required.
- **c.** Note where white finish is omitted.
- **d.** Note ceiling or beams, cornices, etc., to be furred (Type furring)
- **e.** Note walls to be furred (Type furring)
- **f.** Note if lath or base and scratch coats back of tile work, marble or slate are to be included or omitted from this contract.

4. Relations with Other Trades

4–1. **Temporary Enclosures**—Temporary cloth enclosures over all window and other exterior openings throughout the portions of the building to be plastered shall be provided during application and drying of plaster.

4–2. **Temporary Heat, Light and Water**—Shall be supplied by others.

Note: Plastering Contractor or General Contractor may be required to supply salamanders, fuel, heat and maintenance without fire hazard before heating plant is installed, depending on contract agreements. After heating system is installed heat may be supplied by heating system through the General Contractor or Owner.

4–3. **Grounds and Furring**—All necessary wood grounds for furring and lathing shall be installed by others.

4–4. **Inspection of Grounds and Plastering Bases**—All grounds and plastering bases shall be inspected by this contractor from time to time and before commencing his work and he shall report to the Architect and General Contractor any defects in such work which may in his opinion affect satisfactory finish, accuracy and stability of the work under his contract.

4–5. Failure to report such defects requiring correction or replacement before commencing his work shall be construed as acceptance of such work by this Contractor and he shall not be relieved of responsibility and obligation under his guaranty.

5. Protection of Work and Building

5–1. All finished work, such as woodwork and glass, shall be adequately protected by Contractor from damage and plaster droppings and he shall make good such damage at his own expense and without cost to the owner.

5–2. Furnish, install and maintain waterproof protection at source of water, under all mixing boxes and gauging barrels.

5–3. Any spill or drip of any kind shall be taken up at once and any sand, sawdust or protection for floor if removed shall be replaced with new material.

5–4. This Contractor shall be responsible for all damage occasioned by the mixing, handling and storing of mortar and materials or through his failure to provide necessary protection.

6. Patching

6–1. All plaster work which is damaged by this Contractor shall be made good by him at his own expense.

6–2. Plastering Contractor shall do all normal patching and trowelling up following installation of plumbing, wiring, etc., by other trades. Excessive damage by other trades shall be repaired by the plastering contractor and paid for by the contractor who caused the damage.

6–3. This Contractor shall cut out, when required, any defect in his work and replaster and leave in perfect condition.

7. Preparation of Surfaces

7–1. This Contractor shall clean the surface to which or against which plaster is to be applied, removing all mortar droppings, etc., as may be necessary, to allow plaster to adhere to same.

7–2. Concrete surfaces and combination tile and concrete surfaces which are too smooth to receive plaster shall be sufficiently roughened by hacking to secure adequate bond.

Note: (Hacking will be done by others.) Concrete forms should be made of rough boards and be free from oil.

7–3. Efflorescence shall be removed with a wire brush and washed with muriatic acid and water, one (1) to five (5) solution. Remove acid by thorough washing with clean water.

7–4. Wood Lath shall be wetted down as specified under Wood Lath, Sec. 5, Par. 1-1-2.

7–5. Gypsum lath and fibre insulating lath shall not be wetted down at any time.

7–6. Where necessary for suction, wet brick, concrete and clay tile surfaces before plastering.

8. Wood Grounds

All wood grounds shall be provided and installed by the Carpenter and shall be of such thickness and so set to provide for ½ in. thick plaster over all types of laths and gypsum tile and ⅝ in. thick plaster over all brick, clay tile and other masonry.

Wood Lath	¾ in. grounds
Gypsum Lath ⅜ in. thick	⅞ in. grounds
Insulation Lath ½ in. thick	1 in. grounds
Metal Lath—Expanded, Sheet and Wire	¾ in. grounds
Gypsum Tile	½ in. grounds
Brick and Clay Tile, Cinder Block	⅝ in. grounds

Note: Thickness of grounds includes thickness of lath.

9. Sample Finishes

Where special textured finishes are required, this Contractor before proceeding with the work shall prepare and erect, where directed by the Architect, sample panel of each finish required. These samples shall be made to the satisfaction of the Architect. After approval by the Architect, the finished work shall equal the samples in all respects.

10. Workmanship

All work shall be executed by skilled workmen in such a manner as to fulfill the requirements of the drawings and specifications.

11. Cleaning

11–1. After completion of his work, this Contractor shall remove from the building all scaffolding and tools of every sort used by him, taking care not to damage work of the other trades.

11–2. All plaster rubbish, plaster droppings, etc., shall be removed by this Contractor and the building left broom clean.

11–3. This Contractor shall remove all plaster from glass and other finish and leave in first class condition.

12. Guarantee

12–1. This Contractor shall furnish a written guarantee as a part of this contract, warranting all work and materials under this contract against defects for a period of (one year) (specifying time) from the completion and acceptance of the work as shown by date of final payment and he binds himself to repair and replace any defect which may develop within that period, without additional payment beyond the amount of the contract, when ordered to do so by the Owner or the Architect.

12–2. (This shall also include the cost of repairs or replacement of any material, decoration or other finish damaged by the defects.)

SECTION 2 — FURRING AND SUSPENDED CEILINGS

(Specifications for Gold Bond "Clip-on" Systems—Suspended Ceilings and 2-In. Solid Partitions and Hollow Wall Partitions are given in detail in separate books sent gratis upon request)

1. Wood Furring and Suspended Ceilings

Note: Wood furring for suspended ceilings which are to be plastered should be included under Carpentry.

2. Masonry Furring

Masonry furring such as hollow blocks of tile, etc., should be included under Masonry.

3. Materials

3–1. **Metal Furring**—Shall be Gold Bond Cold Rolled Channels. (See page 8)

3–2. **Metal Partition Studs**—Shall be Gold Bond Cold Rolled Channels of sizes specified.

4. Metal Furred and Suspended Ceilings

4–1. **Location**—Ceilings shall be furred or suspended with metal furring where so indicated on plans or on schedules. When the Furring members are *attached* directly to the structural members it shall be considered as a furred ceiling. When the furring members are *suspended* below the structural members of the building it shall be considered as a suspended ceiling.

4–2. **Hangers**—Hangers shall be placed to support runner channels at spans and spacings shown in Table 4-A. Minimum sizes for hangers shall be as follows:

³⁄₁₆ in. Mild Steel Rod or No. 8 ga. Galvannealed Wire for

ceiling areas up to 16 sq. ft. and 1 in. x 3/16 in. Flats for ceiling areas up to 25 sq. ft.

The upper ends of hangers of wire, rods or flats shall be of sufficient length to wrap around beams or purlins or to provide a suitable anchorage in concrete or tile. Where the center to center spacing of steel beams or purlins does not exceed the prescribed maximum spans in the table (4-A) of runner channel spans and spacings, the hangers may be attached directly to the beams or purlins. When ceilings are hung from terra cotta floors, hangers may be installed at tile joints during erection. If hangers are installed after tile is in place, holes shall be bored clear through the tile and the hangers secured on the upper side by steel rods or toggle bolts.

Wire or rod hangers shall be saddle tied or wrapped around the runners in a manner that will develop the full strength of the hangers. The lower end of flat steel hangers shall be bolted to the runner channels with bolts not less than 3/8 in. in diameter.

4–3. Runner Channels—Shall be placed on centers not exceeding the maximum spacings prescribed in the following table and shall be supported by hangers so placed that spans will not exceed those prescribed in the following table. Runner channels shall be placed to conform with the contour of the finished ceiling.

Table 4A—Runner Channel C. to C. Spans and Spacings

SIZE OF RUNNER	MAXIMUM SPAN (hanger to hanger)	MAXIMUM SPACING (runner to runner)	FURRING CHANNEL (minimum size)
1½″ Cold Rolled Channel	4′ 0″	4′ 0″	¾″ C.R.
1½″ (.85 lb.) Hot Rolled Channel	4′ 0″	4′ 0″	¾″ C.R.
2″ Hot Rolled Channels	5′ 0″	*5′ 0″	1″ H.R.
1½″ x 1½″ x 3/16″ Angles	5′ 0″	*5′ 0″	1″ H.R.

*Note that 1 in. hot rolled furring channels are required when the spacing between runners exceeds 4 ft.

Other hot or cold rolled shapes of equivalent strength may be substituted for the above.

4–4. Furring Channels—Furring Channels shall be not less than ¾ in. cold rolled channels with a minimum weight of 300 lbs. per 1000 lineal feet for spans up to 4 ft., and not less than 1 in. hot rolled channels for spans up to 5 ft. They shall be erected at right angles to the runner channels and secured at each crossing with not less than two strands of No. 16 ga. galvanized annealed wire or with attachments of equivalent strength and holding power. Furring channels for various types and weights of metal lath shall be placed on centers not exceeding the spacings prescribed in the following table.

Table 4B—Furring Channel Spacing (C. to C.) for various types of lath

TYPE OF LATH	WEIGHT (lbs. per sq. yd.)	MAXIMUM SPACING		
		Ceilings	Walls	Solid Partitions
Flat Expanded Metal Lath	2.5	....	12″	16″
Flat Expanded Metal Lath	3.4	13½″	16″	16″
⅛″ Flat Rib Exp'd Metal Lath	2.75	12″	16″	16″
⅛″ Flat Rib Exp'd Metal Lath	3.4	19″	19″	24″
⅜″ Rib Expanded Metal Lath	3.4	32″	32″	....
⅜″ Rib Expanded Metal Lath	4.0	32″	32″	....

4–5. Metal Lath—Minimum weight shall be governed by spacing of furring members as specified in Table 4-B, above. Lath shall be applied with the long dimension across the furring channels and shall be secured every 6 in. along each channel with No. 18 gauge galvanized annealed wire. End laps of at least 1 in. shall be made over furring channels. Sides of Flat Expanded Metal Lath shall be lapped not less than 1 in. Sides of Ribbed Lath shall be lapped by nesting the outer ribs. Side laps between channel shall be wire-tied at intervals of not more than 9 inches.

Where ceilings, cornices or other features formed with metal lath, finish against masonry walls, partitions or arch soffits, the lath shall extend onto the masonry surface at least 6 inches. In the case of ⅜ in. Ribbed Lath the corner shall be made with 3 in. Cornerite.

4–6. Brackets for cornices, etc., shall be formed of 1″ x ⅛″ band iron or cold rolled channels spaced same as for runner channels and shall be securely fastened to masonry or other structure supports. They shall be cross-furred and lathed same as other ceiling areas.

5. Metal Stud Partitions

5–1. Solid Partitions

(a) Metal studs for solid partitions shall be not less than ¾ in. cold or hot rolled channels weighing not less than 300 lbs. per thousand lineal feet, and spacing of studs shall conform with weight of lath as in Table 4-B, above.

(b) Studs shall be secured in position by inserting ends into holes drilled into masonry floors and ceilings or by inserting the ceiling ends into Gold Bond "Z" Runners or Prong Runners and the floor ends into channel type floor runners or other stud shoes. (See Page 11) These attachments shall be secured to masonry with concrete stub nails or other devices of adequate holding power.

Where solid partitions are erected between wood floors and ceilings the ends of the channels may be bent at right angles and nailed to the wood members. Or, metal floor and ceiling runners may be used.

Where solid partitions are used under metal lath ceilings, the upper ends of the channels shall be inserted into holes punched through the ceiling lath. The vertical channels shall be wired to horizontal alignment channels which shall be removed after the scratch coat on the lath side has set. Angles between metal lathed walls and ceilings shall be reinforced with 3″ cornerite or by flat expanded metal lath bent to a right angle.

(c) Splicing of studs shall be made by lapping the channels 8 in. with flanges interlocked and wire-tied.

(d) Erection of metal lath for solid lath and metal stud partitions shall be as specified in Par. 4-5. (Note, however, that the metal lath is applied only on one side of the channel studs. Note also, in Table 4-B, that furring channel spacing for solid partition may be greater because both sides of the lath are plastered.)

(e) Solid Partitions over 6 ft. high shall be temporarily braced horizontally on the channel side at intervals not exceeding 6 ft. vertically. Such bracing shall not be removed until the scratch coat on the lath side has set.

(f) Studs adjacent to openings shall be doubled and securely anchored to the frames or bucks. Heads of all openings shall be securely braced.

5–2. Hollow Metal Lath Partitions—Shall consist of a double row of framework as for solid partitions (5-1), each row to be plastered on the outer or lath side, only. Spacing between rows shall be as shown on plans or as required to accommodate soil pipes, ventilation ducts and other features. For maximum reduction of noise transmission there shall be no ties or other connections between opposite sides of hollow wall partitions.

6. Metal Wall Furring

6–1. Where furring is indicated on plans or in schedules for walls, beams, girders or other vertical surfaces, it shall consist of ¾ inch vertical channels spaced as indicated for "walls" in Table 4-B. Wall furring channels shall extend from floor to ceiling arch, shall be firmly secured top and bottom and shall project a proper distance from the wall to permit ties to be made. Intermediate horizontal braces shall be provided at intervals not exceeding 6 feet. Flanges of the

horizontal braces shall face the masonry and the channels shall be secured thereto with hook nails or other suitable devices.
Other furring devices and methods of attachment may be used provided they are equal in effect to the above specified construction.

6–2. Pipe and Ducts—Pipe and ducts required to be enclosed shall be furred as specified for wall furring. Where required to support plumbing fixtures, additional horizontal members of 1½ x 3/16 in. flats shall be wired to vertical members at proper heights to support fixtures.

6–3. Pipe Chases—Over 12 in. wide shall be furred in same manner as wall furring with metal lath extending at least 3 in. each side of opening.

6–4. Heads and Jambs—Fur and lath heads and jambs of windows and doors, when specified or indicated to be plastered, in same manner as for wall furring.

6–5. Corner Beads—Corner beads shall be installed on all exterior angles in plastered rooms or spaces to run from floor to ceiling or to spring line of arches where arch beads are used and shall be of type and gauge as specified under materials.

6–6. Metal Grounds—Shall consist of galvanized steel and shall be set true to plane of finished wall surface and shall be securely fastened to the masonry, furring or other support.

6–7. Miscellaneous Furring—(List here other miscellaneous furring required as for stair soffits and any special features requiring metal furring and lathing.)

6–8. No furring shall be placed until all pipes, conduits, etc., have been permanently placed, inspected and approved.

6–9. General—All furring and lathing, for all vertical or horizontal surfaces for walls, cornices, beams, arches, carved work, etc., shall be level, plumb true and rigid and accurately formed so that all surfaces to receive plastering shall be generally three-quarters (¾) of an inch back of finished surface.

SECTION 3 — LATHING AND PLASTERING ACCESSORIES

Materials

1–1. Wood Lath—Shall be No. 1 Grade, or better, free from knots, sap and bark, approximately ⅜ in. thick, 1½ in. wide and either 32 in. or 48 in. long.

1–2. Gypsum Lath—Shall be Gold Bond Gypsum Lath ⅜ in. thick—16x48 in.

1–3. Metal Lath—Shall be Gold Bond Metal Lath (National Gypsum Company). Specify type, finish and weight for spacings on both horizontal and vertical installations.

1–4. Minimum Weight of Metal Lath
(Following recommendations of Metal Lath Manufacturers Association and American Standards Association.)

TYPE OF LATH	WEIGHT OF LATH	WIRED TO METAL			NAILED TO WOOD	
		Solid Partitions	Walls	Ceilings	Walls	Ceilings
Flat Expanded	2.5	16″	12″	. . . .	16″	. . . .
Flat Expanded	3.4	16″	16″	13½″	16″	16″
Flat (⅛″) Rib	2.75	24″	16″	12″	16″	16″
Flat (⅛″) Rib	3.4	24″	19″	19″	19″	19″
⅜″ Rib	3.4	*. . .	24″	24″	24″	24″
⅜″ Rib	4.0	*. . .	24″	24″	24″	24″

*The extra stiffness of ⅜″ Rib Lath is not needed on Solid Partitions.

1–5. Cornerite—Shall be Gold Bond Cornerite.

1–6. Corner Beads—Shall be Gold Bond Corner Bead (specify type).

1–7. Base Screed—Shall be Gold Bond Base Screed (specify type).

1–8. Picture Mould—Shall be Gold Bond Metal Picture Mould (specify type).

1–9. Metal Plaster Arches—Shall be Gold Bond Metal Plaster Arches (specify type).

2. Application of Wood Lath

2–1. General—Lath with wood lath all (exterior stud walls) (wood furred walls) (stud partition) (ceiling beams or joists) (stair soffits), etc., which are specified to be plastered.

Note: It is recommended that ceiling over furnace and fuel room be lathed with a double layer of gypsum lath or with metal lath for fire protection for a distance of 5 ft. beyond all sides of the furnace. Also stud walls enclosing furnace room.

2–2. All lath shall be spaced ⅜ in. apart, a space of ¼ in. being left between abutting ends and shall be secured at each bearing with 3d 16 ga. blued lathing nails.

2–3. Lath shall be applied at right angles to the supports and joints shall be broken at not more than every seventh lath. No laths shall be carried from room to room. No lathing shall form long vertical joints or be set vertically to fill out at angles or corners.

2–4. Reinforce all re-entrant angles with Gold Bond expanded metal Cornerite and metal corner beads on all exterior angles. All strips shall extend at least 3 in. on each wall and shall butt at ends and not lap and shall be securely nailed or stapled at edges but not in corners.

2–5. Corner Beads—All external corners, both vertical and horizontal, shall be protected with corner beads, of the types or type specified for their full height or length; same to run from top of base to ceiling, heads or beams or to the spring line of arches.

2–6. Where wood lathing on walls, partitions or ceilings abuts masonry work, strips of painted metal lath, extending at least 3 in. on each side of the intersection shall be fastened along the edges to both wall surfaces. Lath shall weigh not less than 2.5 lbs. per sq. yd.

2–7. Where heat pipes are concealed in walls or partitions, they shall be lathed over with strips of Gold Bond Gypsum Lath or Gold Bond Painted Expanded Metal Lath nailed securely to nearest supports.

2–8. Openings or where studs are spaced over 16 in. wide, as back of medicine cabinets, etc., shall be lathed with expanded metal ribbed lath.

Note: Add here any other special condition requiring metal lath, such as back of tile wainscot, etc.

2–9. Grounds for use with wood lathing shall be ¾ in. thick, including thickness of lath and shall be installed as specified under Carpentry.

3. Application of Gold Bond Gypsum Lath

3–1. Lath with Gold Bond Gypsum Lath all (exterior stud walls) (wood furred walls) (stud partitions) (ceiling beams or joists) (stair soffits), etc., which are specified to be plastered. Studs and joists shall be spaced 16 in. on centers.

3–2. Lath panels shall be applied with long dimension at right angles to framing members, with joints broken in each course. Joints between walls and ceiling shall be staggered. The panels shall not be butted tightly together nor be more than ¼ in. apart.

3–3. Lath shall be nailed at every support with No. 13 gauge, 1⅛ in., ⅜ in. flat head, blued nails to be driven with the underside flush with the face of the lath. First nail ⅜ in. from top of panel, then spaced approximately 4 in. apart—5 nails to each stud—20 nails to a 16 x 48 in. panel. Nails along edges to be ⅜ inch in from edge of panels.

3–4. Fit lath tight together at all re-entrant angles and corners. Fit lath accurately around all electric boxes and similar openings. Cutting shall be done with sharp hatchet or knife and then breaking over a straight edge.

3–5. Where any gypsum lath wall, partition or ceiling abuts masonry, strips of Gold Bond Expanded Metal Lath weighing 2.5 lbs. shall extend at least 6 in. on masonry and 6 in. on gypsum lath, fastening edges to masonry and to gypsum lath.

3–6. All re-entrant angles shall be reinforced over the gypsum lath with Gold Bond Cornerite extending 3 in. each side. Ends shall abut and not overlap.

3–7. All grounds for gypsum lath shall be ⅞ in. thick (including thickness of lath furnished, installed and specified under Carpentry).

4. Application of Gold Bond Perforated Gypsum Lath

Same Specifications as for standard Gold Bond Gypsum Lath. For ceilings of Perforated Gypsum Lath with one hour fire rating, see instructions on page 3.

5. Application of Fibre Insulation Lath

Follow manufacturer's instructions.

6. Application of Gold Bond Metal Lath

6–1. General—Lath with expanded metal lath all studs and beams for (interior stud walls) (wood furred walls) (stud partitions) (ceiling beams) (furred or suspended ceilings) (stair soffits).

6–2. Application to Wood Supports—Metal lath shall be nailed every six (6) in. along each support, and side laps shall be wired at intervals of not more than nine (9) in. between supports. Nailing to vertical supports shall be with not smaller than 4d or 6d nails driven to a penetration of not less than ⅞ in. and 1 in. respectively or with No. 14 ga. wire staples driven home. Nailing to horizontal supports shall be with not smaller than 1½ in. No. 11 ga. flat head roofing nails driven home.

6–3. All ⅜″ rib lath shall be fastened at all ribs to each support and shall be wired at edges between supports at intervals of not more than 9 in.

6–4. All metal lath shall be fastened to masonry with special hardened steel nails, self-clinching nails or other device best suited to type of construction.

6–5. Attachments to Metal Supports—Metal lath shall be wired to metal supports at intervals not exceeding 6 in. with not less than No. 18 gauge galvanized soft annealed wire and shall always be tied where sheets lap at channels and at intervals of not more than 9 inches along edges between channels. Rib Lath shall be attached directly to the under side of open web steel joists with not less than two strands of No. 16 ga. or four strands of No. 18 ga. galvanized annealed wire.

6–6. Metal Lath shall be erected with the long dimension of lath across the supports; ⅜ in. Rib Lath with the ribs against the supports.

6–7. Lath shall be first applied to ceilings and the sheets carried down 6 in. on side walls and partitions. If metal lath is not used on the ceilings, the lath shall start at the top of the wall and be bent and carried 6 in. on to the ceiling joists so that no joints shall occur at intersection of ceiling and walls.

6–8. On walls, Flat or ⅛ in. Rib Lath shall be started one stud away from the corner, bent at the corner and carried onto the abutting wall. ⅜″ Rib Lath shall be butted into all joints and strips of Flat Expanded Metal Lath not less than 8 in. wide shall be bent at right angles and fitted into the corner. The outer edge of each 4 in. wing shall be wired to the Rib Lath, but there shall be no ties at the corner.

6–9. Where any wall, partition or ceiling abuts masonry, the metal lath shall extend onto masonry at least 6 in. and be well fastened at edges to joints of the masonry.

6–10. Lath shall be so placed that the lower sheet laps over the upper (not vice versa) and shall be securely attached to supports. Nails, staples or wire ties shall be used to secure the sides of the sheets where they lap at supports.

6–11. Expanded metal shall be lapped at sides not less than ½ in. and at ends not less than 1 in. End laps shall occur only over supports.

6–12. Ribbed lath shall be lapped at sides by nesting outside ribs, and at ends, 1 in.

All grounds for metal lath shall be ¾ in. thick including the lath and will be furnished and installed as specified under Carpentry.

Note: The metal lath specifications have been adapted from those of the Metal Lath Manufacturers Association and the American Standards Association.

Note: No attempt has been made to include specifications for woven wire lath and many other forms of lath. For these, see Manufacturers' Specifications.

7. Metal Arches, Base Screeds, Corner Beads, etc.

7–1. Metal Plaster Arches—Gold Bond Metal Plastering Arches of the number and shape as noted hereinafter or on the drawings, shall be securely set in position over the lath in accordance with the details. Corner beads at jambs shall join arch beads accurately without break.

7–2. Corner Beads—All external corners, both vertical and horizontal, shall be protected with corner beads, of the types or type specified for their full height or length; same to run from top of base to ceiling, heads or beams or to the spring line of arches.

Note: If beveled, chamfered or rounded corners are desired, make note where these will occur and change paragraph above.

7–3. Metal Picture Moulds—Gold Bond Metal Picture Moulds shall be installed in the following locations. (*List here, or in schedule of finishes, or on drawings, spaces to have picture mould.*)
Picture moulds shall be accurately set, true and parallel with ceiling line and substantially secured.

7–4. Metal Base Screeds or Wainscot Cap—Gold Bond Base Screed shall be installed in the following locations. (*List here, or in schedule of finishes, or on drawings, spaces to have base screed for base, wainscot cap, etc.*)

Note: Where special items such as metal bases, with or without electric wire ways; chair rails; door and window trim, etc., are desired, they should be included in the proper trade specification according to local jurisdiction.

SECTION 4 — PLASTERING MATERIALS — BASE AND FINISH COATS

1. Materials and Mixing

1–1. General—All materials used in plastering shall be stored in a dry place above the ground and shall be handled in such a way as to prevent deterioration or intrusion of foreign matter into the plaster.

1–2. Lime, Gypsum and Cement shall be delivered and stored in original packages of the manufacturer. Any materials in containers showing water marks or which have been damaged or materials that have deteriorated shall be immediately removed from the premises.

1–3. Mixing Boxes for base coats shall be clean and tight and shall be cleaned after each mixing.

1–4. Machine mixing shall be permitted in machines made for this purpose if they are cleaned after mixing and kept free of plaster from previous mixings.

1–5. Tools shall be kept clean and shall not be rinsed in mixing water.

1–6. No more material shall be mixed than can be applied in one (1) hour. Do not mix one batch with another. Plaster shall not be retempered after it has commenced to set.

Note: Clean water and proper mixing following the direction of the Manufacturer are of extreme importance to good work.

1–7. Plaster shall be kept from freezing for 24 hours after application and no finish coat shall be applied to base which is frozen.

1–8. In hot, dry weather, all openings shall be enclosed with muslin screens or windows kept closed to prevent plaster from drying before it has set; after that, windows shall be opened to permit wall to dry quickly.

1–9. All materials for plastering, except sand, shall be as manufactured by National Gypsum Company.

2. Water

Water shall be clean and fit to drink, free from oil, acids, alkali or vegetable matter.

3. Sand

3–1. Sand for base coats shall be sharp, clean and free from saline, alkaline, organic or other impurities. It shall be graded from fine to coarse in conformance with the Standard Specifications for Plastering Sand of the American Society for Testing Materials. Should pass through six-mesh screen.

3–2. Sand for finish coats shall all pass a No. 12 screen and shall be white, hard, sharp grains free from soluble salts or injurious amounts of organic matter. Fine sand having rounded particles uniform in size (commonly called quicksand) shall not be used.

4. Plaster

4–1. Base Coat Plaster—Shall be Gold Bond Gypsum Plasters.

4–2. Finish Plaster—Shall be Gold Bond Hydrated Lime Putty with Gold Bond Gauging Plaster or Gold Bond Gypsum Prepared Plaster (specify which).

4–3. Keene's Cement—Shall be Best Bros. Keene's Cement.

SECTION 5 — BASE COAT PLASTER — (SCRATCH AND BROWN)

1. Gypsum Neat Plaster

1-1. ON WOOD LATH—

1–1–1. Scratch Coat—Shall consist of one (1) part of fibered neat plaster to two (2) parts by weight of dry sand.

1–1–2. Soak lath thoroughly 12 to 24 hours before, and again an hour or two before plastering is started.

1–1–3. Apply in two coats, scratch coat to be applied with sufficient pressure to obtain a good key, filling all spaces between the lath and leaving a light coat over lath. Scratch surface thoroughly to secure bond for brown coat.

1–1–4. Brown Coat—Shall consist of one (1) part plaster (fibered or unfibered; specify which) to not more than three (3) parts by weight of dry sand. Second coat shall be applied as soon as scratch coat is set hard and at least ¾ dry, to a true and even surface. Surface of the second brown coat shall be darbied and broomed to provide bond for finish coat.

1-2. ON GYPSUM LATH—

1–2–1. Scratch Coat—Shall consist of one (1) part fibered or unfibered plaster to not more than two (2) parts by weight of dry sand.

1–2–2. The Gypsum Lath shall not be wetted before applying plaster.

1–2–3. Apply with sufficient pressure to work plaster well into the joints. Scratch surface to provide bond for the brown coat.

1–2–4. Brown Coat—Same as above for Wood Lath.

1-3. ON FIBRE INSULATION LATH—

1–3–1. Fibre Insulation Lath shall not be wetted before applying plaster.

1–3–2. Scratch Coat—Shall consist of one (1) part fibered or unfibered plaster (quick setting plaster is preferable) to not more than two (2) parts by weight of dry sand. Apply with sufficient pressure to work plaster well into the joints. Scratch surface to provide bond for the brown coat and let set overnight. The brown coat shall not be applied until the following day.

1–3–3. Brown Coat—Shall consist of one (1) part neat plaster fibered or unfibered to not more than three (3) parts by weight of dry sand. Apply to thickness to fill out grounds and broom surface.

Note: It is recommended that the scratch coat be a bit thicker than the brown coat—the thickness of both coats to be full ½ inch—no less. To insure uniform thickness of plaster, screeds shall be used particularly on large areas.

1-4. ON WIRE OR METAL LATH—

1–4–1. Scratch Coat—Shall consist of one (1) part of fibered neat plaster to not more than two (2) parts, by weight, of dry sand.

1–4–2. First coat shall be applied with sufficient pressure to obtain good key, lightly covering lath. Scratch surface to secure bond for brown coat.

1–4–3. Brown Coat—Same as for Wood Lath above.

1-5. ON BRICK, CLAY TILE, CINDER BLOCK OR GYPSUM TILE—

1–5–1. Scratch Coat—Shall consist of one (1) part of fibered (or unfibered) neat plaster to not more than three (3) parts, by weight, of dry sand.

1–5–2. Soak brick, cinder block and clay tile and sprinkle gypsum tile before commencing plastering to reduce suction.

1–5–3. Apply plaster to thickness of grounds ($\frac{5}{8}$ in.) in two (2) coats. Apply first coat in thin layer to obtain bond and double back immediately with second coat, straighten to true surface with darby and broom surface for finish coat.

2. Gypsum Sanded Plaster

2–1. Gypsum Sanded Plaster shall be applied same as above for Gypsum Neat Plaster without the use of sand but with the addition of water.

2–2. Special Sanded Plaster—Shall be used for clay and gypsum tile, cinder block and brick.

3. Gypsum Wood Fiber Plaster

Note: Wood Fibered Plaster is used invariably for one (1) and two (2) coat work, never three (3) coat work.

3-1. ON WOOD LATH—

3–1–1. Scratch Coat—(Mixed with water.) Soak lath thoroughly 12 to 24 hours before, and again an hour or two before plastering is started.

3–1–2. Apply with sufficient pressure to obtain a good key, filling all spaces between the lath and leaving a light coat over lath. Scratch surface to secure bond for brown coat.

3–1–3. Brown Coat—(Mix equal parts of plaster and sand.) Apply to thickness to fill out to grounds and broom surface.

3-2. ON GYPSUM LATH—

3–2–1. Scratch Coat—(Mixed with water, no sand.) Gypsum Lath shall not be wetted before applying plaster.

3–2–2. Apply with sufficient pressure to work plaster well into joints. Scratch surface to provide bond for brown coat.

3–2–3. Brown Coat—Same as for Wood Lath above.

3-3. ON FIBRE INSULATION LATH—

3–3–1. Fibre Insulation Lath shall not be wetted before applying plaster.

3–3–2. Scratch Coat—(Mixed with water, no sand.) Apply with sufficient pressure to work plaster well into the joints. Scratch surface to provide bond for the brown coat and let set overnight. The brown coat shall not be applied until the following day.

3–3–3. Brown Coat—(Mix equal parts of plaster and sand.) Apply to thickness to fill out to grounds and broom surface.

Note: It is recommended that the scratch coat be a bit thicker than the brown coat—the thickness of both coats to be full $\frac{1}{2}$ inch—no less.

3-4. ON WIRE OR METAL LATH—

3–4–1. Scratch Coat—(Mixed with water, no sand.) Apply with sufficient pressure to obtain good key, lightly covering lath; scratch surface to secure bond for brown coat.

3–4–2. Brown Coat—(Mixed with equal parts of plaster and sand.) Apply to thickness to fill out grounds and broom surface.

3-5. ON BRICK, CLAY TILE, GYPSUM TILE OR CINDER BLOCK

Note: Do not specify wood fibered plaster for these bases.

4. Concrete Bonding Gypsum Plaster

FOR USE ON CONCRETE SURFACES

(See Preparation of Surfaces, Section 1, Par. 7-2.)

4–1. Scratch Coat—(Mixed only with water.) Apply in one (1) or two (2) coats with as great pressure as possible, to thickness of not more than $\frac{3}{8}$ in. and score heavily for bond of finish coat which shall be applied as thin as possible.

4–2. Gold Bond Wood Fibered Gypsum Plaster—May also be used (unsanded) for concrete surfaces in place of Concrete Bonding Plaster.

SECTION 6 — FINISH COAT PLASTER

1. Smooth White Finish

(Lime Putty and Gauging Plaster.)

1–1. Hydrated Lime—Allow to soak twenty-four (24) hours.

1–1-a. E-Z Soak Lime—May be allowed to soak twenty-four (24) hours same as standard hydrated lime or it may be mixed and screened for immediate use in same manner and same proportions as the standard hydrated lime.

1–2. Finish Coat—Shall consist of three (3) parts of lime putty to one part of dry gauging plaster by volume equivalent to two (2) parts of dry, hydrated lime to one (1) part gauging plaster by weight, and shall be thoroughly and uniformly mixed.

1–3. It shall be applied after the base coat is hard, set and about dry. Sprinkle surface of base coat with water before applying finish coat when necessary to kill suction.

Note: Do not apply finish on a base coat containing frost.

1–4. Apply in two (2) coats, first light scratch coat and the second time filling in all imperfections and straighten by means of straight edges.

1–5. Trowel surface to desired finish, keeping wet with brush. Bring same to complete troweling before plaster has set. Surfaces shall be perfectly true and even without scratches, ridges, waves, chips, voids, cracks, etc. All angles must be true, sharp, straight and clean.

2. Prepared Gypsum Finish (Using Gold Bond Trowel Finish Plaster)

2–1. Finish Coat—Plaster is ready after thoroughly mixing with water, allowing to soak for ten (10) minutes without hoeing. Make mix very thin and creamy.

2–2. Base coats must be set and hard and about $\frac{3}{4}$ dry. If too dry, cut suction by sprinkling with clean water.

2–3. Apply finish in three coats; first coat applied as thin as possible to handle and scratch thoroughly into base coat. Let draw for a few minutes, then apply second coat, leveling up. Apply third coat as thin as can be handled, filling in cat faces and imperfections. Let draw and then trowel to smooth surface, applying water sparingly with brush, but not enough to kill face of plaster. Avoid joinings by working top and bottom of wall at same time. Finish coat shall not be less than $\frac{1}{16}$ in. or more than $\frac{1}{8}$ in. thick.

3. Sand Float Finish (Using Gold Bond Sand Float Finish)

3–1. Using prepared Sand Float Finish—add water only.

3–2. Base coats must be set and hard, about ¾ dry, before applying finish coat.

3–3. Finish shall be applied with trowel, scratch in thin coat, then double back with second coat to bring to even, level surface free from surface marks. Use float (wood shingle) (carpet) (felt) or (cork) to bring to final, even, granular finish. Apply water sparingly with brush, being sure to complete floating before plaster has set. Avoid joinings by working top and bottom of wall at same time. Finish coat shall not be less than 1/16 in. or more than ⅛ in. thick.

4. Keene's Cement Lime Trowel Finish

4–1. Finish Coat—Shall be either Medium Hard or Hard. Medium Hard Finish: 100 lbs. Keene's Cement by weight and 50 lbs. of dry hydrated lime. Hard Finish: 100 lbs. Keene's Cement by weight and 25 lbs. of dry hydrated lime. NOTE: 10 lbs. of fine whitewashed sand may be added per 100 lbs. of Keene's Cement if desired.

4–2. Normal scratch and brown gypsum base coats must be set and hard but not thoroughly dry before applying finish coat. If base coat is dry, spray slightly with water but do not soak.

4–3. Apply thin coat well scratched in, then double back and fill out to even surface. Allow to draw for a few minutes, then trowel and brush to a smooth finish, using as little water as possible while troweling. Thickness shall not be less than 1/16 in. or more than ⅛ in.

4–4. Imitation Tile—Marked off for imitation tile, the thickness shall depend on depth of scoring but in no case should be less than 1/16 in. to bottom of scoring.

4–5. Polished Surface—After cement is dry, polish with a cloth to a high polish.

5. Texture Finish (Gold Bond Color Texture)

5–1. Over Gypsum Base Coats—Where used over two-coat gypsum plaster, walls should be floated before application of Color Texture to increase yardage and to insure more uniform thickness. Dry walls may be sized or dampened to increase yardage and give longer time for texturing.

5–2. Over Lime Finish—It is not good practice to apply Color Texture or any other decorative material over fresh lime putty finish, sooner than four months after application of the lime putty. If, however, it is desirable that the walls be decorated at once, Gold Bond Color Texture may be applied as soon as the lime putty is thoroughly set and dry. **The lime must not be sized.**

5–3. Color Texture may be applied over old lime putty walls with or without sizing. Follow detailed instructions packed in every carton.

SECTION 7— ORNAMENTAL PLASTER WORK

1. Cornices and Mouldings

1–1. Cornices and Mouldings of size or girth required should be specified, shown on drawings or noted in schedule of finishes.

2. Ornamental or Enriched Work

2–1. Ornamental or enriched work should also be shown on details, character desired described in specifications and noted on schedule of finishes.

3. Models

3–1. All ornamental work shall be executed from models approved by the Architect.

3–2. Models shall be furnished under a cash allowance of (   )which shall be included by this Contractor in his contract. Models shall be executed by a modeler (selected by) (satisfactory to) the Architect, and the work shall be executed under the direction of the Architect. Models shall be delivered by the modeler at his studio, ready packed, to this Contractor who shall pay all charges of transportation.

4. Materials

4–1. Materials shall be Gold Bond Moulding Plaster for run mouldings and ornamental work.

4–1–1. *Mixing*—Add water only to Gold Bond Moulding Plaster.

5. Run Work

5–1. Run Work shall be run full, true and even in accordance with Architect's details. All curved work shall be run true to radius.

5–1–1. *Templates*—Shall be of metal, clean cut and accurate with the Architect's full-size details.

6. Cast Work

6–1. All enriched work and ornamental work which cannot be run in place on the job, shall be of best quality, cast from moulds. All work shall be properly backed, cast solid or hollow, and properly reinforced with wood or iron, and shall be securely stuck and wired in place.

6–1–1. Cast ornamental coffered ceilings shall be cast in sections and reinforced so that sections can be secured to hangers or other support from ceiling slabs, etc.

6–1–2. All cast work shall be set true in surface and alignment and any rough spots shall be finished and sand papered and left perfect, ready for decoration.

SECTION FOUR

Gold Bond GYPSUM BOARDS

Pages 44-46
GYPSUM WALLBOARDS

Page 46
SPECIFICATIONS

Page 47
TAPE JOINT SYSTEM

Pages 48-49
GRAIN BOARD

Pages 50-51
GYPSUM SHEATHING

Page 52
PAINT PRODUCTS

Gold Bond

GYPSUM WALLBOARDS

PLAIN, TILE AND WOOD GRAIN FINISHES . . .

Lightweight, fireproof, take any decoration.

NATIONAL GYPSUM manufactures a full line of fireproof Gypsum Wallboards for quick modernizing, for adding new rooms, for low-cost homes where wallboard is specified. As pictured below, the panels are made in three thicknesses and with various edge treatments—a style for every type of job.

Here is a fireproof wallboard, so sturdy it can be used almost anywhere—even for jobs where ordinary wallboard might not be suitable. The big, strong panels are easily nailed in place building permanent walls and ceilings that take any decoration. If smooth walls (not paneled) are desired, the joints may be completely concealed as explained on page 47.

Gold Bond's Patented Gypsum Core

All Gold Bond Gypsum Wallboards have a solid core of processed gypsum, which imparts great strength to the panels and enables them to withstand hard knocks and abuse. To many people, the mention of a gypsum rock center suggests a board that might be very heavy, brittle and hard to handle.

On the contrary, Gold Bond Gypsum Boards are relatively light in weight because of National Gypsum Company's patented method of processing the gypsum core. In addition the panels are resilient. They can be sawed as easily as lumber and nailed close to the edge without splitting.

Fireproof . . . Won't Warp or Buckle

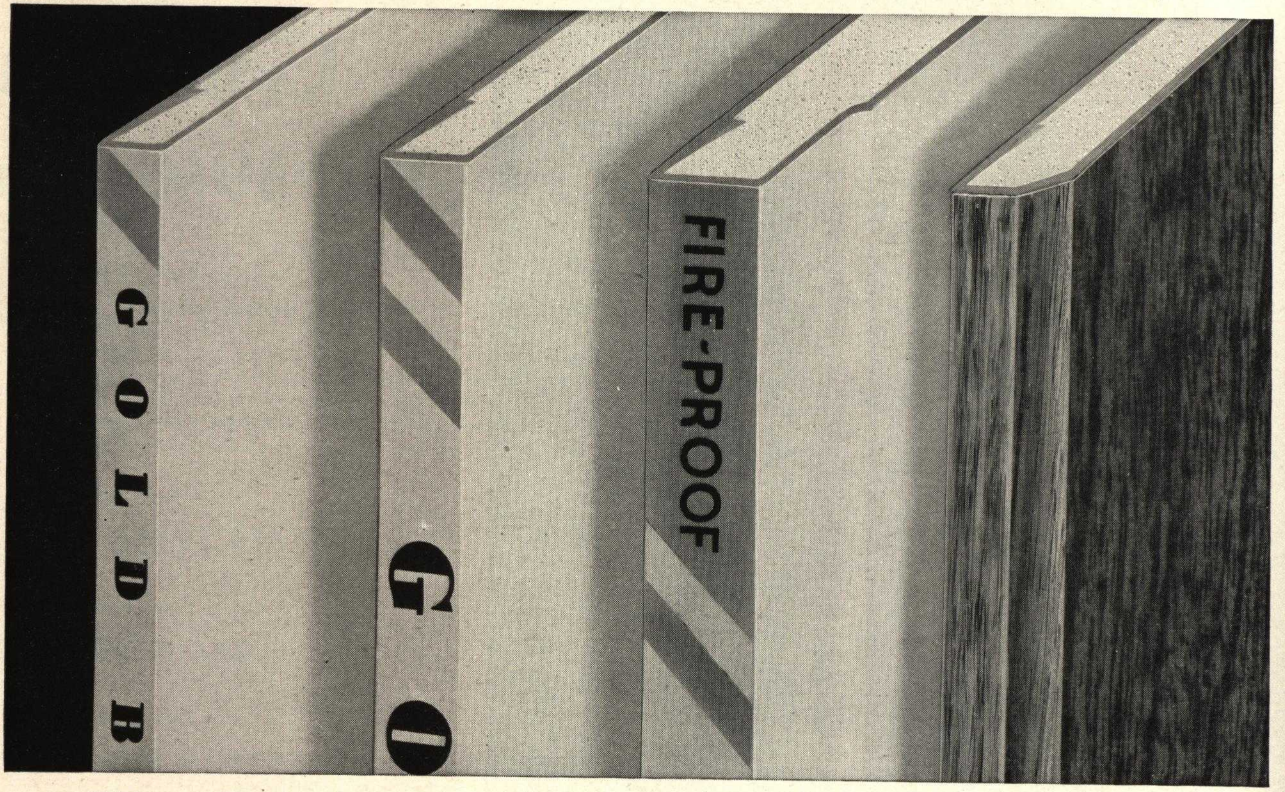
The core of Gold Bond Gypsum Wallboard is incombustible. Because of its rock-like characteristics, expansion or contraction is negligible and the boards cannot warp or buckle under extreme changes of temperature or humidity. Any form of decoration may be used.

Also Tile and Wood Grain Finishes

In addition to standard Gold Bond Gypsum Wallboard, which comes with ivory-colored surface, the panels are made with tile indentations for wainscots in kitchens and baths and are also supplied in three distinctive wood grain finishes—Dark Walnut, Bleached Walnut and Knotty Pine.

Exceeds Federal and ASTM Specifications

National Gypsum Company guarantees its gypsum wallboard products to exceed the strength requirements of federal specification SS-W-51A and ASTM specifications C-36 for gypsum wallboard, and to meet all other requirements of these specifications.

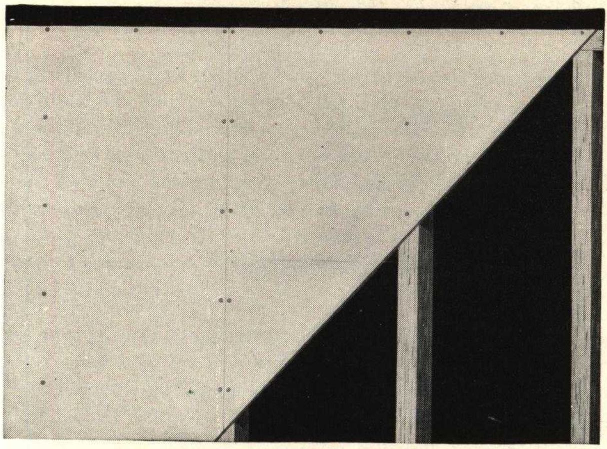


1/4″ Square Edge

3/8″ Square Edge

1/2″ Recessed Edge

3/8″ Beveled Edge



GOLD BOND GYPSUM WALLBOARD

Easy to Apply

Sturdy panels of Gold Bond are nailed directly to the studs and joists, or if modernizing, right over present material. For most jobs, panels of standard ⅜ in. thickness are used or panels ½ in. thick. In some cases, ⅜ in. thickness is used for ceiling and ½ in. thickness for walls. Over old material, panels ¼ in. thick are often used for the sake of economy.

The ¼ in. board should be applied vertically as illustrated above. Standard ⅜ in. or ½ in. panels may be applied vertically or horizontally. Use headers (extra 2 x 4's) where necessary to provide a firm backing behind all edges. Complete instructions for applying, nailing, etc., are given under the specifications on page 46.

For Paneled or Smooth Walls

Paneled effects are easy with Gold Bond Gypsum Wallboard, as the carpenter simply nails up the panels and covers the intersections with wood or metal decorative strips. To insure a pleasing, balanced effect, it is always well to plan the design in advance, drawn to scale.

For smooth, seamless walls and ceilings, to be subsequently papered or textured, the panel intersections can be completely concealed with Gold Bond Perforated Tape Joint System, described on page 47. On jobs where this system is to be used, order Recessed Edge Gold Bond as the slight recess is just deep enough to take the perforated tape and cement. Applying the recessed edge panels horizontally (across studs) keeps the number of joints to a minimum.

Decoration

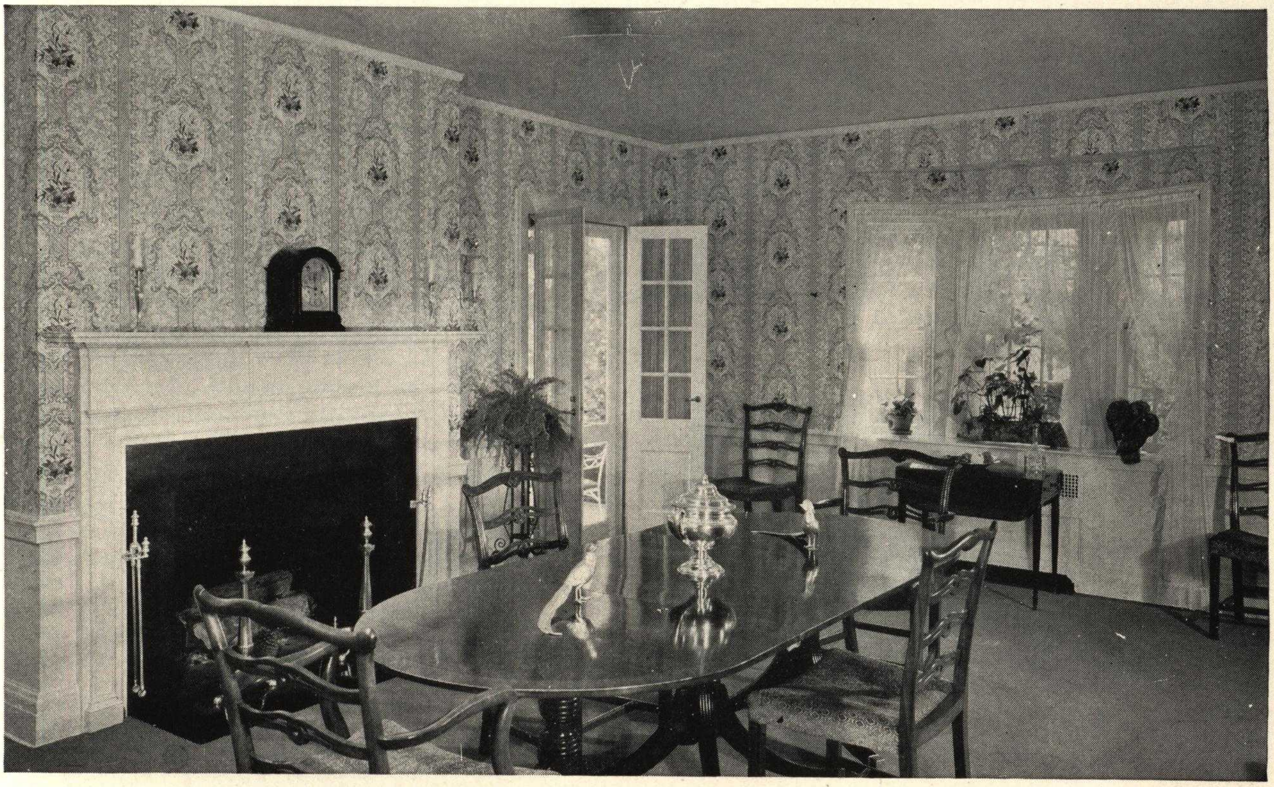
Gold Bond Gypsum Wallboard takes any decoration . . . paint, calcimine, texture or wallpaper. When any type of joint treatment is used over the panel intersections or if the nail heads are "filled," the entire surface should be primed with a good varnish primer before decorating. Never use glue size.

This inexpensive preliminary priming coat equalizes suction throughout; helps to prevent a spotty job and greatly increases paint coverage. A coat of varnish size before wallpapering permits easy removal of paper when redecorating.

Sizes and Thicknesses

THICKNESS	WIDTH	LENGTH
¼ in. Square Edge	48 in.	6, 7, 8, 9, 10, 12 ft.
⅜ in. Square Edge	48 in.	6, 7, 8, 9, 10, 12 ft.
½ in. Square Edge	48 in.	6, 7, 8, 9, 10, 12 ft.
⅜ in. Recessed Edge	48 in.	6, 7, 8, 9, 10, 12 ft.
½ in. Recessed Edge	48 in.	6, 7, 8, 9, 10, 12 ft.
*⅜ in. Beveled Edge	48 in.	8, 10 ft.

*Only in Bleached Walnut and Dark Walnut Grain Board.



Because Gold Bond Gypsum Wallboard won't expand or contract, the panels can be butted together and the joints concealed with Perforated Tape System. Provides a smooth, perfect base for wallpaper, paint or texture.

GOLD BOND GYPSUM WALLBOARD . . . SPECIFICATIONS

1. Scope of Work

List all walls, ceilings and other surfaces which are to be covered with Gold Bond Gypsum Wallboard.

2. Framing

2-1. Framing of all studs and joists shall not exceed 16 in. on center for ⅜" thick wallboard, and 24 in. on center for ½" thick wallboard.

2-2. Nailing members shall be provided in both planes at all interior and exterior angles. Headers shall be provided for support of all fixtures and all cut ends of wallboard falling within the field of the wall or ceiling. No headers are required behind horizontal joints reinforced by means of the Gold Bond Perforated Tape System.

2-3. Nail 1 x 2 in. furring strips over old plaster and/or masonry grounds to provide proper nailing for edges, ends and intermediate support of boards, using nails assuring 1 in. penetration into framing members.

3. Material

3-1. **Wallboard**—Where wallboard is referred to hereinafter, it shall mean Gold Bond Gypsum Wallboard as manufactured by National Gypsum Company, Buffalo, N. Y., and shall comply with ASTM Standard Specifications for Gypsum Wallboard, Serial Designation C 36, and Federal Specification for Gypsum Wallboard, SS-W-51a.

3-2. Gold Bond Gypsum Wallboard shall be (¼ in.) (⅜ in.) (½ in.) thick with (Square Edge) (Recessed Edge) (Beveled Edge). (See preceding page for sizes, thicknesses and edges.) Recessed Edge Wallboard: Joints shall be finished with Gold Bond Perforated Tape System, and added finish may be applied with (Texas Texture). Square Edge Board: Edges and end joints shall be (filled with Gold Bond Finisher) (covered with batten strips or molding) or (left exposed). The wallboard shall be of such lengths as will result in minimum footage of joints.

3-3. Nails for ¼ in. and ⅜ in. board shall be 4d, 14 gauge, cement coated, flat head nails, 1⅜ in. long. For ½ in. board, 5d, 13½ gauge, cement coated, flat head nails 1⅝ in. long. Over old plaster use 6d, 13 gauge cement coated, flat head nails 1⅞ in. long.

4. Handling and Preparation

4-1. **Receiving Material**—Wallboard shall be piled flat on floors with reverse side up except first board which shall be turned down. Note: Wallboard shall not be delivered on the job until doors and windows are in place.

4-2. Cutting or Sawing—Gold Bond Gypsum Wallboard shall be cut either by scoring or by sawing. Scoring: the face side paper should be cut with a sharp knife run along the side of a straight edge, followed by snapping the board core at this cut by bending down its end while the wallboard is supported below the cut line by a straight edge such as the edge of a table or saw horse; then cutting the back paper at the crease formed by the core break. Sawing: use a regular hand saw and cut the wallboard with face side up. Ends and all cut edges shall be sand-papered, if necessary, to provide smooth, neat joining.

5. Application

5-1. **Inspection**—Before applying wallboard see that all edges and ends are perfect and all ends and cut edges are face beveled and that faces of boards are undamaged.

5-2. Wallboard shall be applied with back toward studs and nailed directly to studs and joists. All boards shall be in moderate contact. No board shall be forced into place. The cut edges on all interior and exterior corners shall be hidden by overlapping them with the abutting board. Vertical joints shall be staggered and shall not occur on the same stud on both sides of a partition. Except where reinforced joints are used, avoid vertical and horizontal joints running into corners of framing for windows, doors or other openings.

5-3-1. **Nailing**—Nails shall be not less than ⅜ in. from edges and ends of panels and shall be spaced 5 to 7 in. apart on ceilings and 6 to 8 in. apart on walls.

5-3-2. Drive nails "home" with the heads in a "dimple" (formed by round-faced hammer) slightly below the surface of the board, without using a nail set and without breaking the paper face. Do not stagger nails on adjoining edges or ends.

5-4. **Ceilings**—Ceiling panels shall be erected first. Apply panels at right angles to joists. Panels shall be in one piece as far as possible, but if joints are necessary, they should be staggered except when joints are to be covered with panel strips.

5-5. **Walls**—Wallboard shall be applied as follows:

5-5-1. *Vertically*—Where possible, use full lengths from floor to ceiling. Panels shall be nailed first at edge adjoining panel last applied; next on the first intermediate stud; next on the second intermediate stud, and finally, the far edge and the ends. All vertical joints of the wallboard shall be centered over the framing members. Vertical joints on opposite sides of partitions shall not come opposite each other on same stud.

5-5-2. *Horizontally*—Use full length panels that will keep the number of end joints to a minimum. Where possible, full length panels shall extend above and below openings instead of "piecing." The upper course of the wallboard shall be erected before applying the lower course.

A folder, "How to Apply and Decorate Gypsum Wallboard" will be mailed upon request

Gold Bond

TAPE JOINT SYSTEM

Approved method of concealing wallboard joints to provide a smooth wall ready for decoration.

GOLD BOND PERFORATED TAPE SYSTEM is primarily for use with *Recessed Edge* Gold Bond Gypsum Wallboard but may also be used with square edge board. It comprises the use of a fibre perforated tape in conjunction with a smooth-working cementing plaster.

This system works particularly well with recessed edge board because the recess along the edge provides a perfect channel for the tape and cement. The pictures at the right show the easy steps in applying. If normal care is used, the panel intersections can be completely concealed prior to painting, papering or texturing.

Instructions for Use

Preparing the Cement—A special cement in powder form is supplied with each package of perforated tape. Sift the powder into clean water and mix to a stiff, putty-like consistency. Allow the mixture to stand for about one-half hour before using. If it becomes thinner during use, add more powder.

Application—Fill the hollow or channel with the cement as illustrated in Step No. 1, using a Gold Bond Finishing Knife or any 4-in. putty knife. The cement should extend ½ in. beyond the edge of the channel. Apply the perforated tape immediately, directly over the cement and press it into place with the putty knife. This forces some of the cement through the perforations, as shown in Step No. 2.

In Step No. 3, the cement forced through the perforations should be smoothed over with putty knife and allowed to dry. In Step No. 4, apply another thin coating of cement so that the tape will be completely hidden. Feather out edges as smoothly as possible and let dry thoroughly. Intermediate nail heads should also be carefully filled with cement and brought flush with the surface of the board. Step No. 5, the last operation, is sanding the treated joints and the filled nail heads with coarse and then fine sandpaper.

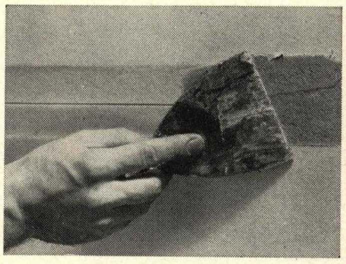
Inside and outside wall corners and joints between cut ends of boards should be covered with perforated tape cemented into place and finished like regular recessed edge joints. Detailed instructions are supplied with each package.

Decoration—Apply a good varnish size over the cemented joints and preferably over the entire wallboard surface. Then apply paint or paper according to manufacturer's instructions. Varnish size applied before wallpaper permits easy removal of the paper before redecorating.

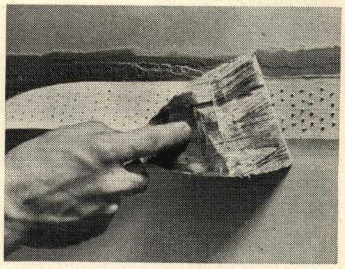
Sizes and Coverage

Regular carton contains one 250-ft. roll of Perforated Tape and cementing plaster—enough for about 550 to 650 sq. ft. of gypsum wallboard.

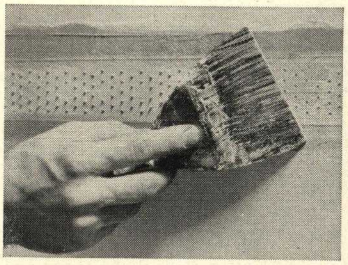
Small carton contains one 60-ft. roll of Perforated Tape and cementing plaster—enough for about 150 to 200 sq. ft. of gypsum wallboard.



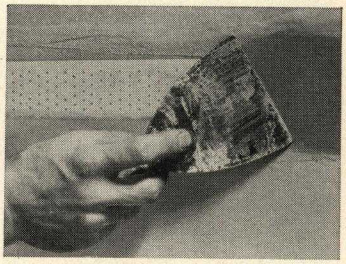
1. Fill each channel with Tape Joint Cement. Apply perforated tape.



2. Press tape into cement with putty knife, forcing cement through perforations.



3. Cement is then smoothed down with a gentle stroke of knife and allowed to dry.



4. Apply another thin coat of cement over the tape and feather out smoothly.

5. After 24 hours, sand smooth and level with surface of the wallboard.

Gold Bond

GYPSUM WALLBOARDS

GRAIN BOARD . . The richness of expensive wood paneling at a much lower cost. Three finishes.

GOLD BOND GRAIN BOARD is standard gypsum board with an imitation wood grain surface that defies detection upon casual inspection. Supplied in Dark Walnut, Bleached Walnut and Knotty Pine finishes.

In addition to its rich-looking grain surface, Gold Bond offers these important advantages over real wood: The solid gypsum core is fireproof and unaffected by dampness. Won't expand, contract, warp or peel. Saws like lumber and may be nailed without splitting. Installations made years ago, show not the slightest tendency toward fading.

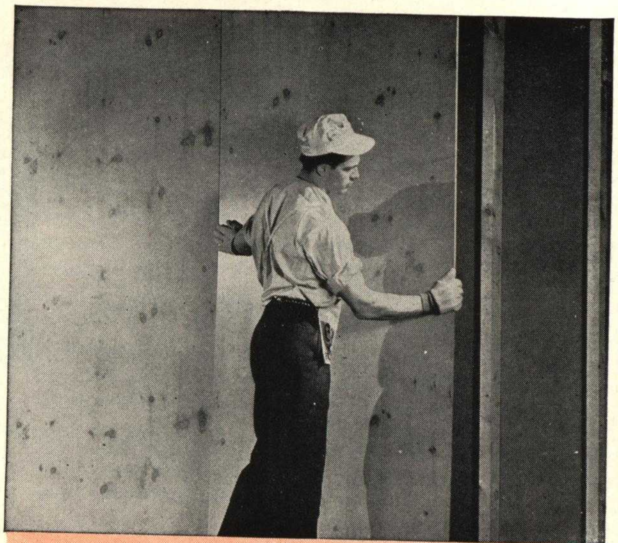
The low cost of Gold Bond Grain Board plus the fact that no decoration is needed, makes it an economical and beautiful finish for homes, offices, stores, restaurants, etc.

Supplied with Lacquer Finish

Made with a protective lacquer finish which can easily be cleaned with a damp cloth. No further decorative treatment is necessary.

Thicknesses and Sizes

Standard thickness 3/8 in. (Special thicknesses, 1/2 in. and 1/4 in. on special volume orders.) Dark Walnut and Bleached Walnut panels are made with Beveled Edges; Knotty Pine with Square Edges. Panels are 48 in. wide and 8, 9 and 10 ft. long.



Sturdy panels of Gold Bond Grain Board are nailed to the wood framing or right over the old material.

The walls of this "Early American" room are of Gold Bond Bleached Walnut Grain Board.

GOLD BOND GRAIN BOARD

Application Instructions

Plan—If decorative mouldings are to be used over the joints, prepare a paneling design in advance so that studs and headers can be located to provide a firm nailing surface behind the trim.

One of the simplest and most satisfactory ways of paneling a room is the horizontal method used in the Early American room pictured on the opposite page. In this instance a full width panel was lined with the top of the door and window frames. A second panel was cut lengthwise to provide the narrow section above the door and the wainscot section below. The only new trim required was the cove moulding at the ceiling line. Door and window frames, baseboard and cove moulding were bleached and stained to harmonize with the color of the Bleached Walnut board.

Framework—In new frame construction, place studs on 16-in. centers and install extra studs and headers where necessary to provide a firm, even nailing surface behind all panel edges.

Over old walls, apply 1 x 2-in. furring strips to provide a level nailing surface behind all panel edges and at 16-in. intervals across the width of the panels. If the old plaster surface is level, furring strips will not be required; but the location of the studs should be marked on the wall surface for guidance in nailing the panels.

Nailing—Nail along edges and to intermediate studs and joists using 5d cement coated nails with $\frac{1}{4}''$ flat heads. Use 6d nails when applying Grain Board over old plaster walls. Nails colored to match the boards are available, or the nail heads may be spotted with a matching color after the boards are applied. Nails should be driven flush but not set below the surface of the cover paper. (Alternate: Use 5d finished nails driven at 45 degree angle, counter sunk and puttied with spackling putty or plastic wood colored to match finish board. Note: use padded or plastic-headed hammer to drive colored nails.)

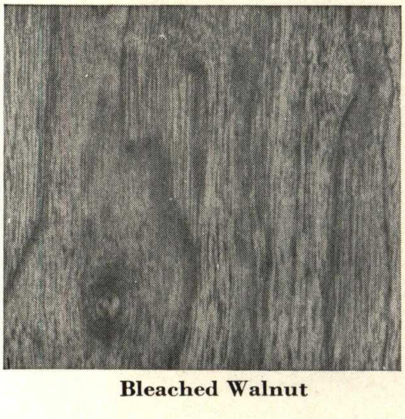
On the edges that are to be covered with mouldings, use cement coated flat head nails. Use 5d nails ($1\frac{5}{8}$ in. long) when nailing directly to the wood framing and 6d nails ($1\frac{7}{8}$ in. long) when working over old plaster.

Paneling—Decorative trim may be applied if desired, but it is not necessary. The beveled edges of the Dark Walnut and Bleached Walnut panels form pleasing V-grooves at the joints, while the square edges of the Knotty Pine panels can be butted together to make the seams unnoticeable.

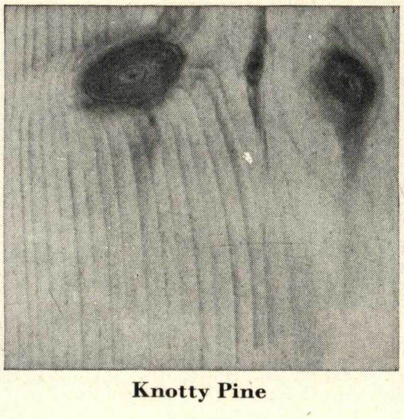
Decoration—As Gold Bond Grain Board comes already lacquered, no further decoration is needed. Like real wood, additional finishing will, of course, improve the richness. Always apply a priming coat of clear white shellac and then a coat of flat varnish. Gold Bond Grain Board may be cleaned by going over it lightly with a damp cloth. It is advisable to install chair rails where table and chairs frequently would otherwise touch a wall finished with wood grained gypsum wallboard.

The Gold Bond Knotty Pine Grain Board in this distinctive dining room can scarcely be distinguished from the Knotty Pine millwork and trim.

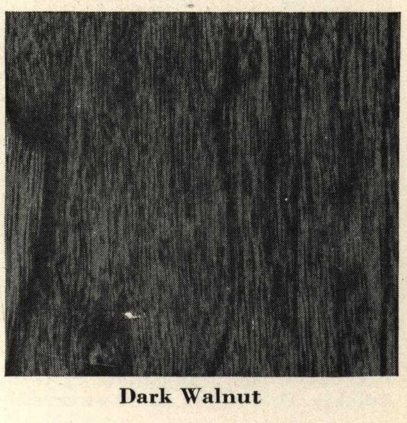
Gold Bond Grain Boards bring The Beauty of Fine Woods—The Economy of Wallboard—The Fire Safety of Gypsum Rock



Bleached Walnut



Knotty Pine



Dark Walnut

Gold Bond

GYPSUM SHEATHING

Big, husky panels full $1/2''$ thick add structural strength . . . . Fireproof . . . . Asphalt-treated core.

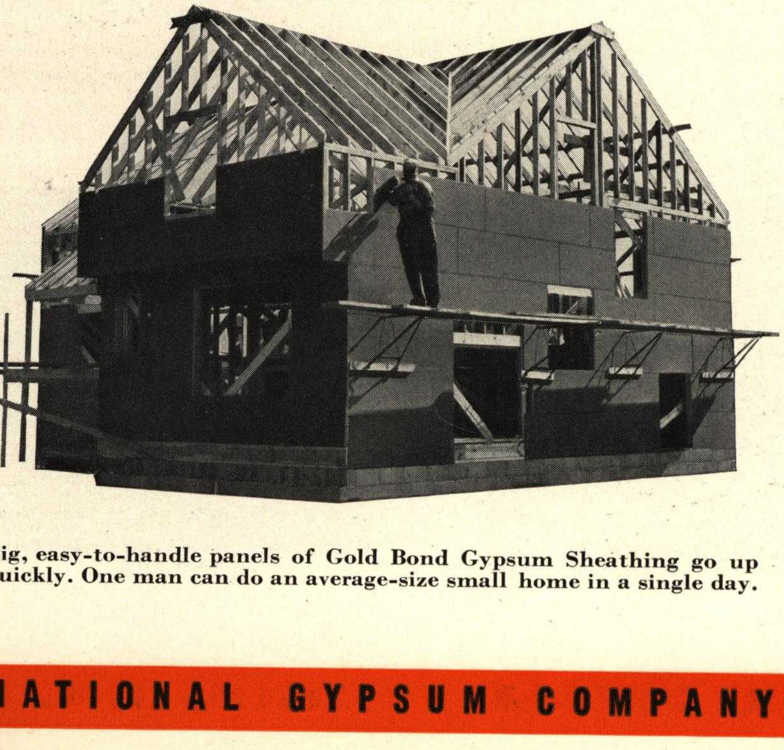
GOLD Bond Gypsum Sheathing is a sturdy, knotless, fireproof and water-repellent sheathing material. It is made in big panels, ½ in. thick, 2 ft. wide and 8 ft. long.

Fireproof — Water-repellent

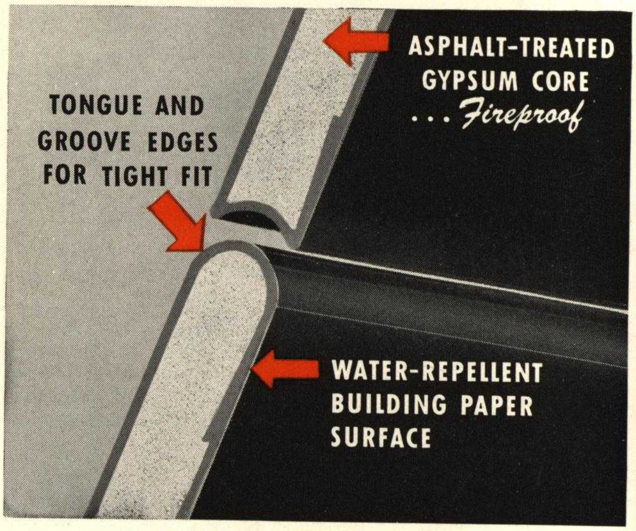
The core of fireproof, asphalt-treated, processed gypsum rock is protected by a tough, moisture resistant casing. Both surfaces and all edges receive a thorough waterproofing treatment. So effective is the water-repellent finish of Gold Bond Gypsum Sheathing that it has been approved for use without building paper or asphalt felt under all exterior finishes except stucco and brick veneer.

Costs Less — Applies Faster

Gold Bond Gypsum Sheathing costs less per square foot than most other sheathing materials. Because the big panels are accurately sized to fit standard stud spacing, there is practically no waste and almost no cutting to fit. This results in a saving of one third or more in the cost of application as compared with that of old-style wood sheathing.



Big, easy-to-handle panels of Gold Bond Gypsum Sheathing go up quickly. One man can do an average-size small home in a single day.


ASPHALT-TREATED GYPSUM CORE ... *Fireproof*
TONGUE AND GROOVE EDGES FOR TIGHT FIT
WATER-REPELLENT BUILDING PAPER SURFACE

Gold Bond Gypsum Sheathing is water-repellent. Core of processed asphalt-gypsum is fireproof. Tongue and groove edges make wind-tight joints. Big panels add structural strength.

Adds Structural Strength

Tests made by independent testing laboratories show that Gold Bond Gypsum Sheathing, applied as specified, gives any frame building great resistance to racking strains.

Builds Wind-tight Walls

The large size of Gold Bond Gypsum Sheathing panels (2 ft. wide by 8 ft. long) reduces the number of joints to a minimum. Since end joints fall on framing members and long edges are tongued and grooved, the wall is practically proof against wind infiltration.

Size and Thicknesses

Gold Bond Sheathing is made in only one size, 2 ft. wide x 8 ft. long x ½ in. thick.

Short edges are square cut; long edges tongued and grooved.

Both surfaces and all edges are protected by a water-proofing treatment.

GOLD BOND GYPSUM SHEATHING

Specifications

1. **Scope of Work**
All exterior walls shall be covered with Gold Bond Gypsum Sheathing.

2. **Framing**
Framing members shall be erected in the manner of approved standard practice and spaced 16 in. on centers.

3. **Materials**
3-1. Sheathing shall be Water Repellent Gold Bond Gypsum Sheathing as manufactured by National Gypsum Company, ½ in. thick, 2 ft. wide, 8 ft. long.

3-2. Nails shall be 11 gauge, galvanized flat head roofing nails 1¾ in. long, 7/16″ head.

4. **Application**
4-1. Apply panels horizontally with long edges at right angles to studding and groove edge down. All vertical joints shall be staggered and all end joints shall center over framing members. T and G edges shall be fitted tightly together.

Nails shall be ⅜ in. in from edges and ends and spaced 4 in. apart, 7 nails to the board on each support back of *shingles, asbestos siding and brick veneer;* and 8 in. apart, 4 nails to the board on each support back of *wood siding and stucco.*

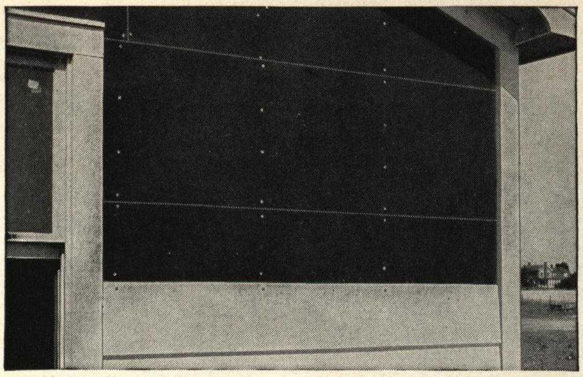
5. **Exterior Finishes**
Note: Building paper is not required over Gold Bond Gypsum Sheathing but in some sections it must be used to meet F.H.A. regulations.

5-1. **Wood Siding**—Apply directly over gypsum sheathing; the nails to go through the sheathing and well into the wood framing. All siding joints shall butt over wood framing members.

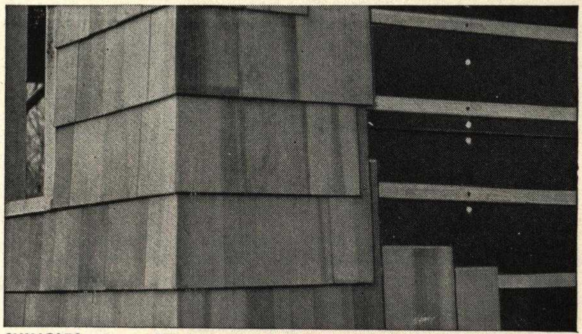
5-2. **Shingles**—Apply 1 x 2 in. wood furring strips over sheathing at right angles to studding, to take shingle weathering specified. Furring strips to be securely nailed through the sheathing to the wood framing.

5-3. **Stucco**—Apply building paper or asphalt felt over the gypsum sheathing. Use 3.4 Gold Bond Corrugated Diamond Mesh Lath over the sheathing to be securely nailed through the sheathing to the wood framing. Apply stucco according to manufacturer's instructions.

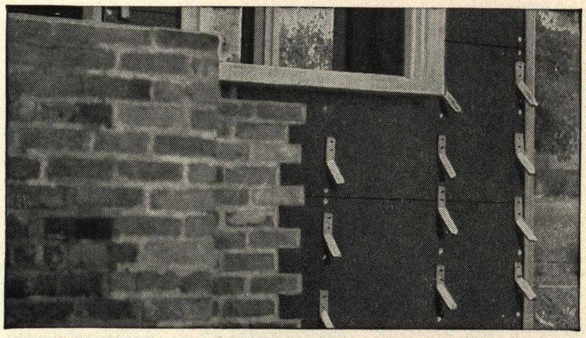
5-4. **Stone or Brick Veneer**—Apply building paper or asphalt felt over the gypsum sheathing. Wall ties for masonry veneer shall be nailed securely through the sheathing to the wood framing. Air space of 1 in. shall be left between sheathing and veneer.



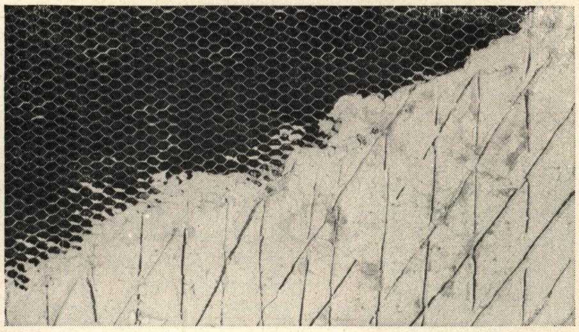
WOOD SIDING—Apply directly over gypsum sheathing; the nails to go through the sheathing and well into the wood framing. All siding joints shall butt over wood framing members.



SHINGLES—Apply 1 x 2 in. wood furring strips over sheathing at right angles to studding, to take shingle weathering specified. Furring strips to be securely nailed through the sheathing to the wood framing.



STONE OR BRICK—Apply building paper or asphalt felt over the gypsum sheathing and install wall ties. Air space of 1 in. shall be left between sheathing and back of veneer.



STUCCO—Apply building paper or asphalt felt over the gypsum sheathing. Use 3.4 Gold Bond Corrugated Diamond Mesh Lath. Nail it securely through furring strips and sheathing to the wood framing. Apply stucco according to manufacturers specifications.

Gold Bond

PAINT PRODUCTS

Resin emulsion and casein paints for interiors.

Precolored plastic paint for textured effects.

SUNFLEX DELUXE

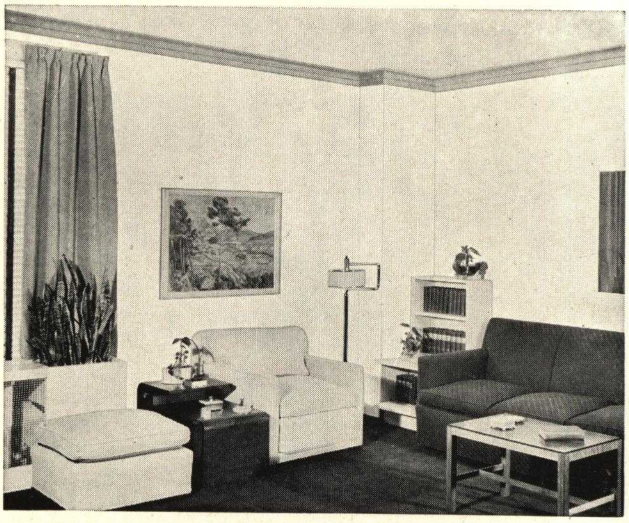
Resin-emulsion Paint

JUST LIKE ADDING WINDOWS
GOLD BOND
Sunflex
DELUXE
THE 1-HOUR WALL PAINT THAT'S WASHABLE
ONE U. S. GALLON

Gold Bond Sunflex Deluxe is a new type resin-emulsion paint with washability far exceeding Federal Specification TT-P-88.

Gold Bond Sunflex Deluxe, for interior walls and ceilings comes in the form of a resin emulsion paste which is thinned to painting consistency with half its volume of water. It spreads easily, covering from 400 to 800 square feet per gallon, depending upon the surface. It gives better one-coat coverage over brick, concrete, cinder block, painted wood or metal, or even wallpaper. It should not be applied over whitewash, calcimine or loose paint or paper.

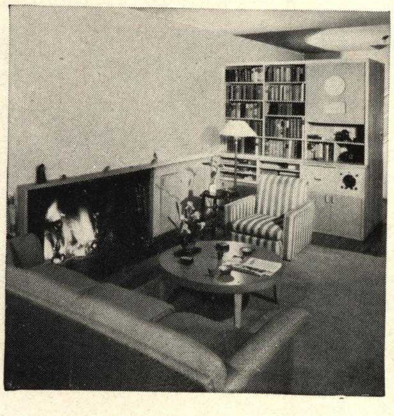
Dries in one hour to a beautiful suede-like finish free of gloss or glare. Washable after two weeks on the wall.



The twelve standard colors of Sunflex Deluxe were selected by leading color stylists. Any special colors can be had by intermixing or by toning with Gold Bond Crafcolors.

Non-Inflammable Non-Toxic

Because they are non-inflammable, Standard Sunflex and Sunflex Deluxe are ideal for decorating walls and ceilings of hotels, apartment and office buildings, and other public structures. Non-toxic, they also may be sprayed without risk.



SUNFLEX

Casein Paste Paint

Sunflex is the original 1-hour wall paint. It brings new beauty to modern interiors at remarkable savings in time and money. Painting with Sunflex is cheaper, usually, than washing soiled walls.

Sunflex Casein Paste Paint thins with water, dries to the same beautiful suede-like finish as Sunflex Deluxe and gives even higher light reflection. It applies fast with brush, spray or roller.

Eleven choice wall colors and white.

JUST LIKE ADDING WINDOWS
GOLD BOND
Sunflex
CASEIN PASTE PAINT
ONE U.S. GALLON
NEW CREAM

Gold Bond Sunflex Casein Paint is the original casein paste paint. It ranks highest in light reflection, lowest in cost on the wall.

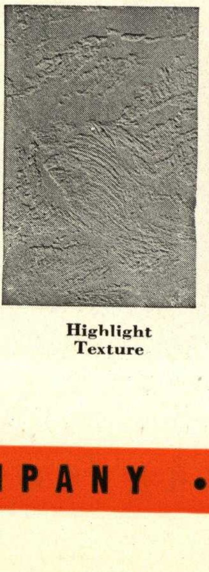
COLOR TEXTURE

Pre-colored Plastic Plaster

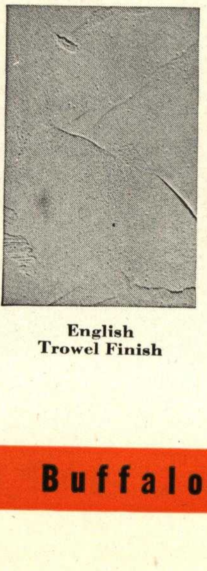
Color Texture is a casein-base product with outstanding texturing qualities. The powder is mixed with water, applied in a thin coat and then textured with a stipple brush, sponge, whisk broom or crumpled paper. Complete instructions in each package. It's washable.

Pre-colored in 6 popular wall tints. Needs no decoration but may be glazed with Gold Bond Craftcoat or painted with Sunflex or Sunflex Deluxe.

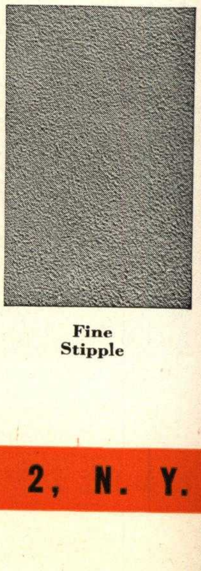
Gold Bond
COLOR TEXTURE
WHITE



Highlight Texture



English Trowel Finish



Fine Stipple

Gold Bond
ROCK WOOL
NATIONAL GYPSUM COMPANY, Buffalo, N.Y.
CARTON

SECTION FIVE

Gold Bond INSULATION PRODUCTS

Pages 54-57
ROCK WOOL PRODUCTS

Pages 54-55
HOME INSULATION

Page 56
COMMERCIAL BUILDING INSULATION

Page 57
INDUSTRIAL INSULATION

Page 58
INSULATION BOARD AND TILE

Pages 59-60
INSULATION SHEATHING

Gold Bond

INSULATION PRODUCTS

ROCK WOOL BATTS with VAPOR BARRIER . . . .

Cuts winter heating costs . . Permanently fireproof.

THE advantages of home insulation are now so well known that prospective home builders, almost without exception, want it in their homes. Year 'round comfort, smaller heating plant investment, lower operating costs and greater fire protection are just a few of insulation's recognized contributions to better modern living.

An Ideal Home Insulation

Gold Bond Rock Wool is an all-mineral product. That means it is *permanently* fireproof. It contains nothing to attract rodents, termites or other vermin. It is waterproof and will not support fungus or bacteria growth and so will not decay. Its light weight places no strain on structural members and, once installed, it requires no further attention, yet will outlast the building it insulates.

Its insulating efficiency is very high due to its low conductivity factor of only .27 Btu per hr., per sq. ft., per in. thickness, per degree Fahrenheit temperature difference. Above all, it pays a big dividend every year in the form of fuel savings, even where winters are only moderately cold.

A Barrier to Sound, Cold, Heat

Gold Bond Rock Wool is recommended for exterior and party walls, under attic floors (or between roof rafters) and under floors over unheated areas. This forms a blanket of insulation around the house that blocks the passage of sound and heat. Furnace warmth is held inside, making room temperatures more uniform throughout the house and saving up to 40% in fuel.

In summer, the same barrier of insulation keeps out the stifling heat of the sun. No stored-up attic heat seeps into living quarters below, to keep rooms unbearably warm and stuffy until long after nightfall. Instead the entire house is 8° to 15° cooler; comfortable bedrooms offer a good night's rest.

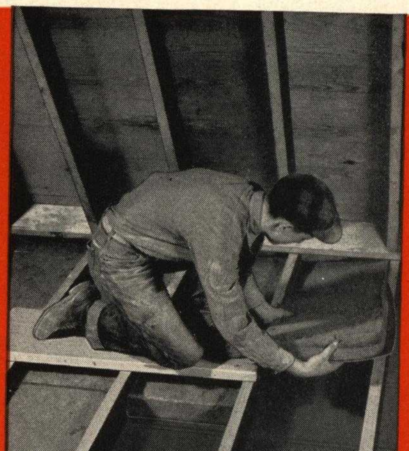
A Style For Every Need

There is a form of Gold Bond Rock Wool for every type of application. Illustrations below show Gold Bond Rock Wool Batts with Vapor Barrier, being installed in sidewall and attic. The handling quality and convenient sizes of these Batts make them easier to install. They quickly go into place, saving time and labor cost.

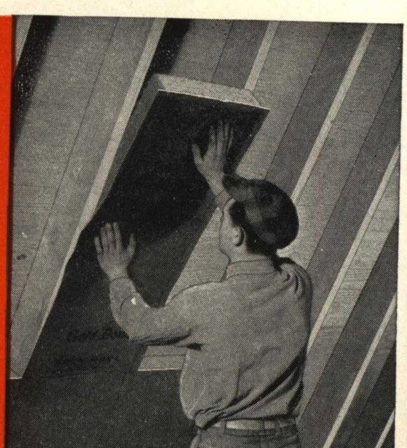
Gold Bond Loose Wool is available for hand-packing around doors and window frames, in corners, etc. It is not recommended for any other application.

Gold Bond Type A Blowing Wool is supplied only for pneumatic application (usually in existing buildings).

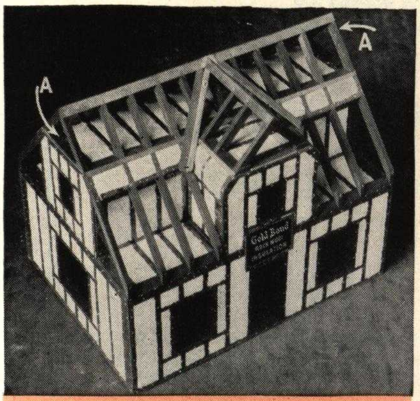
SIDEWALL insulation, because it offers such a large area in which to stop the passage of heat, adds a big share to the enjoyment of the *completely* insulated home.



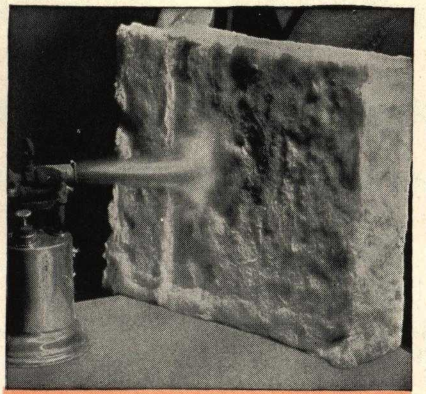
UNFLOORED-ATTIC insulation is quickly installed between floor joists. Vapor Barrier always faces house interior. Directions are printed on back of each batt.



FLOORED ATTIC can be insulated easily by placing Gold Bond Rock Wool Batts between rafters and collar joists. Ventilation should be provided above collar joists.



MODEL showing rock wool treatment. Louvers for ventilation should be provided at points "A" in the peaks of the opposite main gables.



FIREPROOF. Even the piercing flame of a blow torch can't harm Gold Bond Rock Wool! Provides an effective fire stop between wall studs.

WATERPROOF. Sheds water effectively because the fibres are waterproofed. Even when saturated, will be as effective as ever upon drying.

Vapor Barrier Protects Against Moisture

Gold Bond Rock Wool Batts are supplied with vapor barrier on one side—a tough, waterproofed membrane that provides protection against passage of moisture through wall and ceiling areas. An overlap along its edges provides a handy nailing surface to speed application and to complete the vapor barrier.

Styles, Sizes and Thicknesses

STANDARD BATTS (With Vapor Barrier)
Full Thick 15 x 24 in. (2½ sq. ft.) and 15 x 48 in. (5 sq. ft.)
Semi-Thick 15 x 24 in. (2½ sq. ft.) and 15 x 48 in. (5 sq. ft.)

POURING WOOL
Pours freely from bag for application between joints of non-standard spacing in unfloored attics. Bulk-shipped in bags.

LOOSE ROCK WOOL
For hand-packing small spaces only. Bulk-shipped in bags.

TYPE "A" BLOWING WOOL
For pneumatic application only. Bulk-shipped in bags.

SPECIFICATIONS

1. Scope

1–1. Gold Bond Rock Wool shall be installed between studs of exterior walls, between all attic floor joists, between studs of attic stairwell and in soffit of attic stairs.

If instead of application between attic floor joists, batts are installed between attic collar joists and in rafter slopes from collar joists to eaves, (or in knee walls and floor joists to eaves) batts may be omitted from attic stairway.

1–2. Louvers or similar protected openings shall be provided in attic above highest level of Gold Bond Rock Wool installed, and located as to permit cross ventilation. Their total free vent area of intake and exhaust shall each equal 1 sq. in. per 4 sq. ft. of insulated horizontal attic-area.

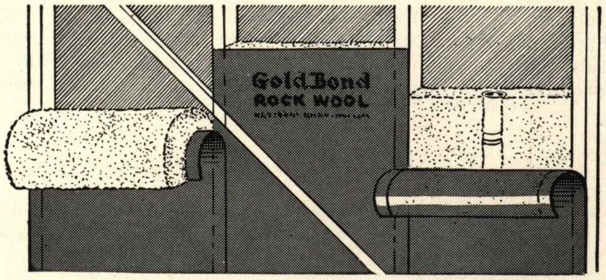
2. Materials

2–1. Insulation shall be Gold Bond Rock Wool Insulation (specify type and thickness) manufactured by NATIONAL GYPSUM COMPANY, Buffalo, N. Y. and delivered to job in original containers.

3. Application

3–1. Directions on Vapor Barrier of Batts shall be followed.

3–2. Walls and Pitched Roofs—Gold Bond Rock Wool (specify type and thickness) shall be installed in exterior walls and roof where noted on plans and shaped as necessary to fit snugly all irregular spaces and with vapor barrier facing building interior. Start batts below floor line for fire-stopping and work up, butting batts snugly against each other. In no case shall insulation in attic be installed to peak of pitched roof, but shall be extended across collar joists at least 24″ below peak of roof to permit provision of adequate ventilation above insulation as instructed in manufacturer's directions printed on the Vapor Barrier. The Vapor Barrier shall be continuous and shall be cut only when necessary. When cutting, trim wool back from edge to allow overlap of Barrier. Wool shall be placed on cold side of pipes, leaving only Vapor Barrier on warm side (see diagram above.) Overlap of Vapor Barrier shall be nailed or stapled to 2 in. face of studs at not over 6 in. on centers if no covering material is to be added. On rafter slopes and collar joists, Batts shall be covered with supporting gypsum wallboard of (specify type and thickness) or held in place by wire lacing across face of studs or joists.



Correct wall application of rock wool batts. Note that the rock wool is placed on cold side of pipes, leaving only the vapor barrier on the warm (or room) side.

3–3. Ceilings and Floors—Gold Bond Rock Wool (state type and thickness) shall be applied between joists with Vapor Barrier facing house interior. Where application is over an unheated area, Batts shall be held snugly against subflooring by poultry wire stretched across joist space and tacked to joist sides with wood cleats. Ventilation in such areas shall be provided in a ratio of 1 sq. ft. of free vent area for each 15 lineal feet of wall enclosing the insulated area.

INSULATING EXISTING BUILDINGS. Attic areas can be insulated as illustrated on the opposite page. For maximum fuel savings and year 'round comfort, sidewalls should be insulated as well. This can be done by the blowing method. Your local Gold Bond Applicator's name is in the classified section of your phone book under "Insulation". Call him for an estimate without charge or obligation.

Gold Bond

INSULATION PRODUCTS

Commercial buildings insulated with Gold Bond Rock Wool enjoy much lower operating costs.

TODAY operating costs are all-important in the planning of any commercial or institutional building. That is why Gold Bond Rock Wool insulation offers so much to both the architect and building operator. Actual "before-and-after" experiences amply demonstrate that this modern construction feature substantially reduces heating and redecorating costs.

Desired temperatures are more easily maintained even in severe winter weather. In summer, top floors are much cooler. In apartment buildings, hotels, office buildings and similar rented properties, this increased comfort means satisfied tenants and fewer vacancies. So, in addition to lower operating costs, Gold Bond Rock Wool Insulation offers increased revenue. These advantages, in fact, soon repay in actual dollars and cents the cost of the insulation. And, of course, insulation is essential to the efficient operation of air-conditioning systems.

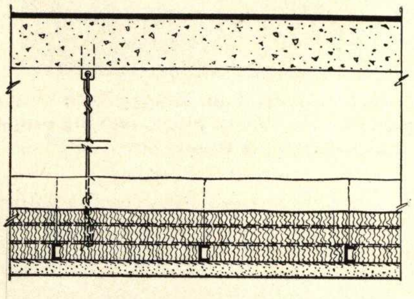
Sidewall Insulation in masonry wall buildings may be installed by placing rock wool batts horizontally behind free-standing or attached furring channels spaced 3 in. from the outer wall The Hollow Wall Partition System (Pages 17 to 24) shows an excellent method of erecting furring channels.

Top Ceiling Application can also be made in batt form, whether the ceiling is of wood, steel, or concrete construction.

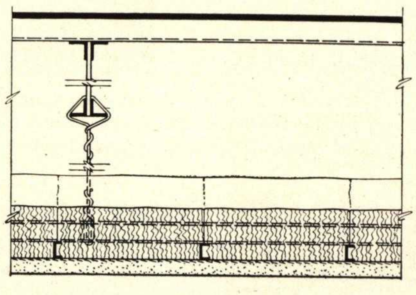
All batts should be placed with vapor barrier facing building interior and each one snugly butted against all adjoining batts.

Adequate ventilation is necessary for condensation control. Two or more vents should be installed above the insulation to provide one square inch each of free intake and exhaust area for every four square feet of insulated flat ceiling. Write us for detailed application specifications.

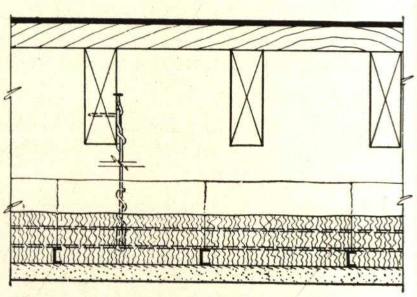
SUSPENDED CEILING APPLICATION under three types of flat roof:



REINFORCED CONCRETE ROOF—U Values: Uninsulated .40; 3″ Gold Bond Rock Wool .0735. Annual Fuel Savings: 4¼ tons coal, or equivalent, per M Sq. Ft. insulated area, in climate equal to that of Milwaukee, Wisc.

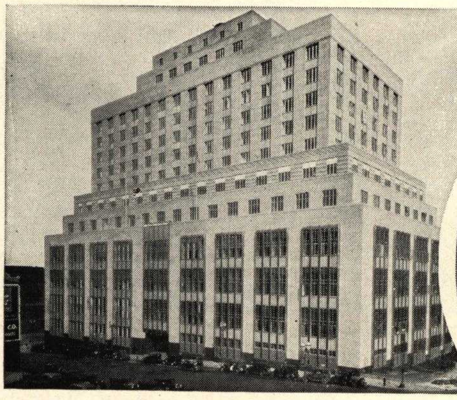


STEEL ROOF DECK—U Values: Uninsulated .46; 3″ Gold Bond Rock Wool .075. Annual Fuel Savings: 5¼ tons coal, or equivalent, per M Sq. Ft. insulated area, in climate equal to that of Milwaukee, Wisc.

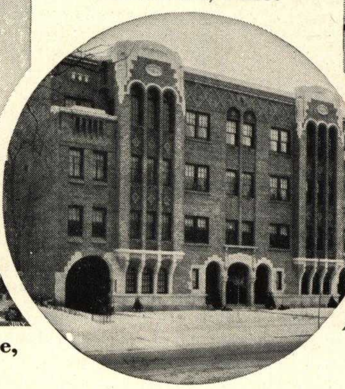


1⅝″ WOOD PLANK ROOF—U Values: Uninsulated .26; 3″ Gold Bond Rock Wool .067. Annual Fuel Savings: 2½ tons coal, or equivalent, per M Sq. Ft. insulated area, in climate equal to that of Milwaukee, Wisc.

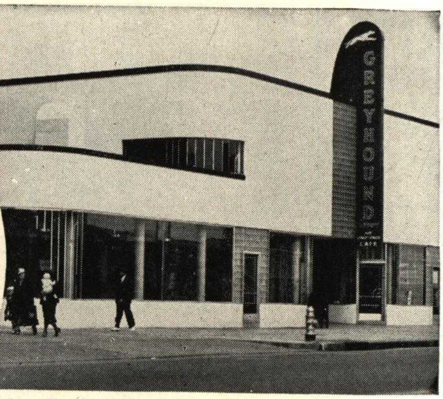
A Few Representative Buildings Insulated With Gold Bond Rock Wool



United States Government Post Office, St. Paul, Minn.



Traybird Apartments, Cleveland, Ohio.



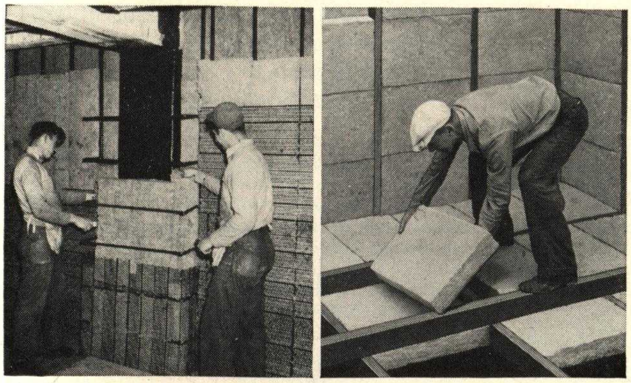
Teche Greyhound Bus Terminal Building, New Orleans, La.

Gold Bond

INDUSTRIAL INSULATION

ZEROCEL, FLEXFELT and INSULATING CEMENT

for low and high-temperature application.

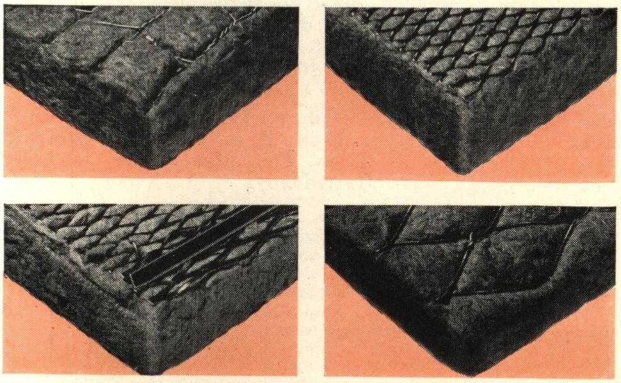


**Installing Zerocel on typical cold storage jobs.
Left, steel channel studs; right, wood stud construction.**

ZEROCEL

Gold Bond Zerocel was introduced in 1933. It is now used for practically every type of low temperature installation . . . walk-in refrigerators; food locker plants; commercial and industrial cold storage plants; marine and land food-transport units. It is a semi-rigid Felt, easy to handle and install. About 95% of its bulk consists of trapped air-cells of high insulating value.

Thermal Conductivity: .24 at 60°F mean temperature. It is water-repellent, non-capillary, will not absorb moisture from the air. Fireproof, rotproof, does not attract rodents or vermin. Not only odorless but will not absorb odors. Physically and chemically stable. Stock sizes: 24″ x 30″ and 15″ x 48″ in thicknesses from 1″ to 6″. Special sizes on order. Write for folder.



Four typical styles of Gold Bond Flexfelt Blankets.

FLEXFELT

Gold Bond Flexfelt Metal Mesh Blankets consist of a pad of special mineral wool, felted and reinforced on both sides by metal mesh bound together by tie-wires through the mineral wool. They are available in various combinations of metal mesh to form an extremely rugged, fireproof material for insulation up to 1200°F. They are used in the industrial field wherever it is desired to conserve heat . . . on boilers, breechings, heat exchangers, fractionating towers, stills and many other industrial and commercial applications.

After application, Flexfelt Blankets are covered with a coat of Gold Bond Insulating Cement.

Stock sizes: 24″ x 48″ and 24″ x 96″ in thicknesses from 1″ to 6″. Literature and application details on request.

Troweling Insulating Cement over Flexfelt Blanket.

INSULATING CEMENT

Gold Bond Insulating Cement is composed of mineral wool, asbestos and special clays. Its fibrous, pelleted structure gives it high insulating efficiency. It is simply mixed with water and applied with trowel or hands on hot or cold, rough or smooth surfaces. Has strong adhesion and will not develop shrinkage cracks upon drying.

Used as a scratch or finish coat over insulating blankets or as a monolithic primary insulating coat on irregular surfaces such as valves and fittings. Fully efficient up to 1800°F; reclaimable from installations up to 1200°F; simply break it up, remix and re-apply. Fireproof, non-corrosive. One pound covers about one square foot ½″ thick *after drying.*

Write for technical data on specific applications.

Gold Bond

INSULATION PRODUCTS

FIBRE INSULATION BOARD, PLANK and TILE

for insulation, noise reduction, decoration.

Southern Wood Fibre

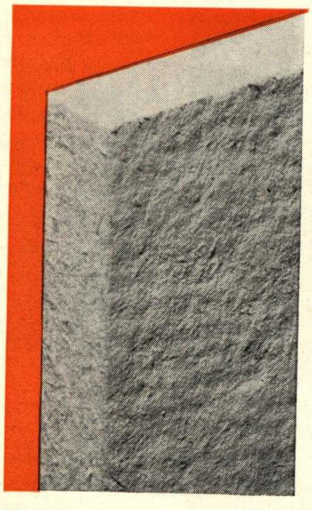
SOUTHERN woods exclusively are used in Gold Bond Fibre Insulation Boards—"live" woods that give the finished product beauty, strength and permanence. To make this all-wood product, logs are cut into short lengths, then mechanically ground into fibres and fabricated into big structural boards. National Gypsum Company's Multi-seal process of treating the fibres builds strength and moisture-resistance into every panel.

New "Automatic" Application

Gold Bond Fibre Insulation Tile and Plank now feature a concealed fastening edge for nailing or stapling. Fastening the material with a trigger-type hand stapler can be done in a fraction of the time required with nailing or other methods.

High Insulating Value

Innumerable air cells, trapped in the meshes of the finely ground wood fibres, retard the passage of heat. This is what gives Gold Bond Fibre Insulation Boards their valuable insulation properties. (They comply with Federal Specifications LLL-F-321-b.)



Photograph shows the fine mat surface of Gold Bond Insulation Board. Thickness of Board, Tile and Plank is full ½ inch.

Decorative Qualities

Gold Bond Fibre Insulation Boards and Tiles make pleasing walls and ceilings in their standard color or they may be painted with any good interior wall paint. For a beautiful suede-like finish in the choicest modern colors we particularly recommend Gold Bond Sunflex or Sunflex Deluxe. The boards may be beveled as in the room shown below to give the effect of random width planks.

"Quietation"

Lining a room with Gold Bond Insulation Board or Tile brings effective reduction of noise, whether the sounds originate in the insulated room, in adjoining rooms or outside the house. This makes for added comfort in homes, added efficiency in offices or workrooms and added profits in restaurants and clubs where increased patronage almost invariably follows this noise-reducing treatment.

Colors and Sizes

Normally, Gold Bond Fibre Insulation Board is made in a variety of textures, colors and sizes in panels, planks and tiles, but until the urgency of the housing shortage is eased, the following sizes only will be supplied:

Wallboard—½ in. thick; 4 ft. wide; 6, 7, 8, 9, 10 ft. long. Fine Mat Surface in Ivory Coated only.

Tiles—½ in. thick; 12 in. x 12 in., 12 in. x 24 in., 16 in. x 16 in. and 16 in. x 32 in. Fine Mat Surface in Ivory Coated only.

Planks—½ in. thick; 8, 10, 12 or 16 in. wide x 7, 8 or 9 ft. long, with decorative bead. Fine Mat Surface in Ivory Coated only.

Gold Bond Insulation Board was beveled in random widths and stenciled with Mexican motif designs to give this basement playroom its distinctive appearance.

Commercial buildings of all kinds prove that heat-saving, light-reflecting noise-reducing ceilings of Gold Bond Insulation Tiles are sound investments.

Gold Bond

INSULATION PRODUCTS

FIBRE INSULATION SHEATHING . . . . "Weather-conditions" homes against heat, cold and moisture.

WEATHER-CONDITIONED housing, quickly and at reasonable cost, is needed now as never before. No single type of building material does more to meet this need than Gold Bond Fibre Insulation Sheathing.

Quickly Erected

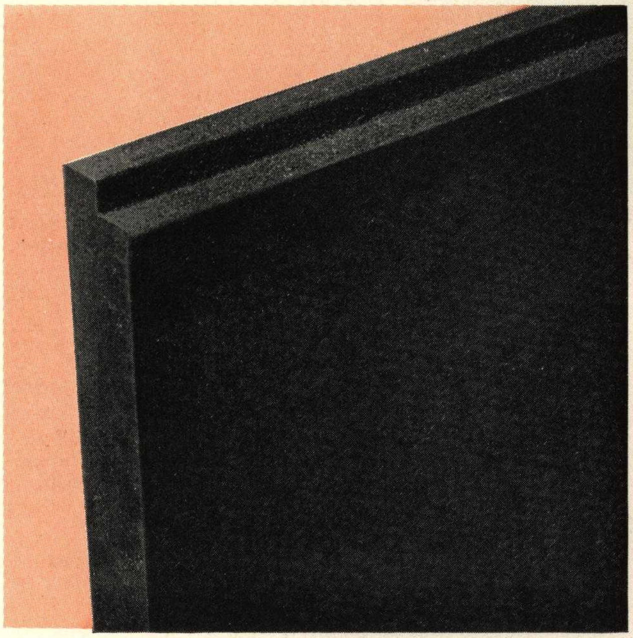
The big, lightweight panels go up so fast that one man can sheath the average small house in a day. The asphalt-coated panels provide immediate protection against driving rains so the interior work can proceed regardless of the weather. The big panels add greatly to the structural strength of the building and provide a permanently wind-tight enclosure which is also a good insulator. The "k" value is .33 b.t.u.'s.

Made of Sturdy Wood Fibre

Gold Bond Insulation Sheathing is made from specially selected Southern woods. Their tough fibres are rendered moisture-resistant by National's Multi-Seal process and then fabricated into big, sturdy panels. A heavy asphalt coating on both surfaces and all edges gives the panels additional protection against dampness.

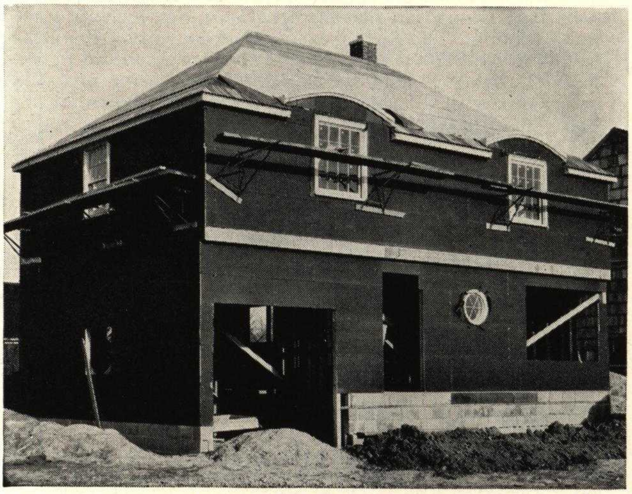
Convenient Sizes

Gold Bond Fibre Insulation Sheathing is supplied in panels $\frac{25}{32}$ in. thick, 2 ft. wide and 8 ft. long with ship-lap edges, and 4 ft. wide and 8 ft. long with square edges. Panels $\frac{1}{2}$ in. thick, 4 ft. wide and 8 ft. long also are available.



EXTRA MOISTURE PROTECTION

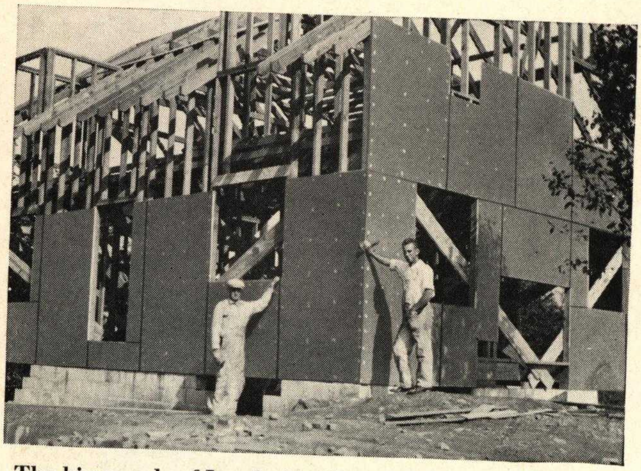
Both surfaces and all edges of Gold Bond Insulation Sheathing are protected against moisture by a heavy coating of asphalt. This is in addition to the moisture-resistant treatment of the wood fibres by National Gypsum Company's famous Multi-seal process.



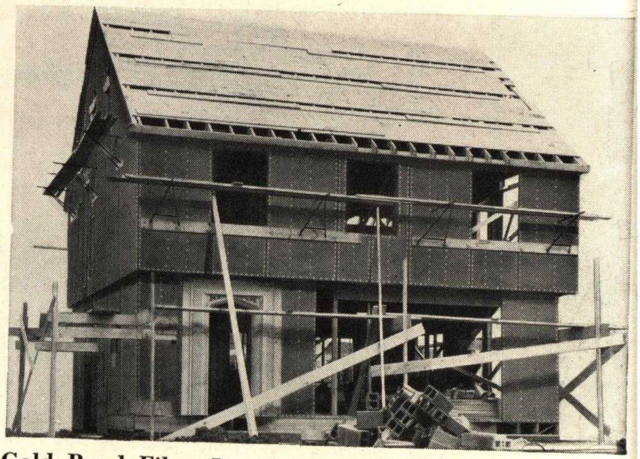
The big panels of Gold Bond Fibre Insulation Sheathing add structural strength and fuel-saving insulation.

4'x8' panels are handled easily by one man. Each panel spans space between seven studs.

GOLD BOND FIBRE INSULATION SHEATHING



The big panels of Insulation Sheathing go up so fast that two men can sheath average small home in a half-day.



Gold Bond Fibre Insulation Sheathing gives a home effective "weather-conditioning" at reasonable cost.

SPECIFICATIONS

1. Scope of Work

Gold Bond Insulation Sheathing shall be used for all exterior wall surfaces which are to be covered by wood siding, shingles, stucco, masonry veneer or other exterior finish.

2. Framing

2–1. Framing members shall be erected in the manner of approved standard practice and accurately spaced 12 in. or 16 in. on centers.

2–2. Extra headers (not smaller than 2 x 4's) shall be installed where necessary to provide a firm backing behind side and end edges of all full or trimmed panels of insulation sheathing.

3. Material

3-1. Sheathing—Shall be Gold Bond Fibre Insulation Sheathing as manufactured by National Gypsum Company and shall be delivered to the job in original wrappings. Boards shall be $\frac{25}{32}$ in. thick, 2 ft. wide and 8 ft. long with ship-lap edges; or 4 ft. wide and 8 ft. long with square edges; or $\frac{1}{2}$ in. thick, 4 ft. wide and 8 ft. long only.

3–2. Nails—Shall be $1\frac{1}{2}$ in. or $1\frac{3}{4}$ in. galvanized roofing nails with $\frac{1}{2}$ in. heads. Nails shall be long enough to penetrate the wood framing at least 1 in.

4. Application

4-1. Ship-lap edge. Panels shall be applied horizontally, or at right angles to the studding. Center all end joints over framing members, except at corners, openings, etc. Break all joints in alternate courses. Panels shall be spaced approximately $\frac{3}{16}$ in. apart at the end joints but shall fit snugly at door and window frames. Panels shall not be forced into place.

4-2. Square edge. Panels shall be applied vertically, with the long sides running parallel to the studding. All joints shall center over framing members. Panels shall be spaced approximately $\frac{3}{16}$ in. apart at the end joints but shall fit snugly at door and window frames. Panels shall not be forced into place.

4–3. Nailing—Sheathing panels shall be nailed to each framing member, nailing first to the intermediate framing members with nails spaced about 6 in. apart. Nails at the edge shall be 3 in. to 4 in. apart and shall be placed not less than $\frac{3}{8}$ in. in from the edge of the panels. The nail heads shall be driven flush with the surface of the panels but not countersunk.

5. Exterior Finishes

Note 1—Gold Bond Insulation Sheathing shall not be used as a nailing base for any other material. Furring strips, stucco bases, siding, etc. shall be nailed *through the sheathing* to the wood framing.

Note 2—Building paper is not required over Gold Bond Insulation Sheathing except under exterior stucco. In some sections, however, F.H.A. regulations call for the use of building paper on all types of jobs.

5–1. Wood siding shall be applied directly over the sheathing and shall be nailed to each framing member with nails long enough to penetrate the wood at least 1 in. All joints of wood siding shall butt on the center of framing members.

5–2. Shingles—Furring strips, at least 1 in. x 2 in. shall be applied horizontally over the sheathing and secured with nails long enough to penetrate at least one inch into the wood framing. The furring strips shall be spaced the same distance, center to center, as the weather exposure of the shingles. Shingles shall be nailed to the furring strips in accordance with the shingle manufacturer's specifications.

5–3. Stucco—The entire sheathed surface shall be covered with a continuous layer of asphalt saturated waterproof paper weighing at least 10 lbs. per 100 square feet. It shall be lapped at least 4 in. at all joints and around all openings. Self-furring stucco bases such as Gold Bond Diamond Mesh Self-furring Lath may be applied directly over the building paper. If necessary, strips of wood lath shall be used to make certain that there is at least $\frac{3}{8}$ in. of clear space between the stucco base and the sheathing. Non-furring stucco bases such as standard Gold Bond Diamond-Mesh Lath shall be nailed to 1 in. x 2 in. wood furring strips applied vertically over the studs. All nailing of both furring strips and stucco base shall be done with nails or staples that are long enough to extend through the sheathing and at least 1 in. into the wood framing.

5–4. Masonry Veneer—Metal ties for masonry veneer shall be attached over the sheathing with nails that penetrate 1 in. or more into the wood framing members. At least $\frac{1}{2}$ in. of clear space shall be left between the sheathing and the back of the veneer.

NATIONAL GYPSUM COMPANY
DISTRICT SALES OFFICES

ATLANTA 3, GA.
1107 Citizens & Southern National Bank Building
(35 Broad, N.W.) *Telephone Walnut 2782*

BALTIMORE 2, MD.
1509 Esso Standard Oil Building
(St. Paul Pl. & Franklin St.) *Telephone Vernon 1760*

BIRMINGHAM 3, ALA.
1411 First National Building (17 No. 20th Street)
Telephone 4-7554

BOSTON 16, MASS.
250 Stuart Street, Back Bay
Telephone Hubbard 1766

BUFFALO 2, N. Y.
National Gypsum Building (325 Delaware Avenue)
Telephone Cleveland 5880

CHICAGO 2, ILL.
1727 Chicago Title & Trust Building
(111 W. Washington Street) *Telephone State 3592*

CLEVELAND 15, OHIO
620 Republic Building (25 Prospect Ave., N.W.)
Telephone Tower 1-5063

CINCINNATI 2, OHIO
1001 Times-Star Building (800 Broadway)
Telephone Dunbar 8410

DALLAS 1, TEXAS
603 Burt Building (1700 Patterson Ave. cor. North Ervay)
Telephone R-2175

DETROIT 2, MICH.
229 Curtiss Building (2842 W. Grand Boulevard)
Telephone Trinity 1-6677

KANSAS CITY 6, MO.
1345 Dierks Building (1006 Grand Avenue)
Telephone Victor 3746

MINNEAPOLIS 2, MINN.
700 National Building (527 Second Avenue South)
Telephone Main 6347

NEW YORK 17, N. Y.
2149 Graybar Building (420 Lexington Avenue)
Telephone Lexington 2-5910

PHILADELPHIA 3, PA.
1181 Broad Street Station Building (1617 Penn. Blvd.)
Telephone Rittenhouse 6-6474

ST. LOUIS 10, MO.
701 Chouteau Building (4030 Chouteau Avenue)
Telephone Jefferson 8866

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